



CABINET

**IMMEDIATELY FOLLOWING CABINET SCRUTINY COMMITTEE
WEDNESDAY, 21st OCTOBER 2020**

REMOTELY VIA TEAMS

**ALL MOBILE TELEPHONES TO BE SWITCHED TO SILENT FOR THE
DURATION OF THE MEETING**

Part 1

1. Appointment of Chairperson
2. Declarations of Interest
3. Minutes of Previous Meeting (*Pages 3 - 10*)
 - 30th September 2020
 - 17th September 2020
4. Strategic School Improvement Programme –
Proposal to Establish an English Medium 3 - 11 School to Replace,
Alltwen, Godre'rgraig and Llangiwg Primary Schools.

(*Pages 11 - 86*)
5. Swansea Bay City Deal Infrastructure Project

(*Pages 87 - 276*)
6. Environment (Wales) Act 2016 consideration of the Neath Port
Talbot Biodiversity Duty Plan (BDP) 2017 Implementation Report

(*Pages 277 - 330*)

7. Urgent Items

Any urgent items (whether public or exempt) at the discretion of the Chairperson pursuant to Section 100b (4)(B) of the Local Government Act 1972

S.Phillips
Chief Executive

Civic Centre
Port Talbot

Thursday, 15 October 2020

Cabinet Members:

Councillors. R.G.Jones, C.Clement-Williams, D.Jones, E.V.Latham,
A.R.Lockyer, P.A.Rees, P.D.Richards, A.Wingrave and L.Jones

EXECUTIVE DECISION RECORD**CABINET****30 SEPTEMBER 2020****Cabinet Members:**

Councillors: R.G.Jones (Chairperson), C.Clement-Williams, D.Jones, E.V.Latham, A.R.Lockyer, P.A.Rees, P.D.Richards and L.Jones

Officers in Attendance:

S.Phillips, A.Evans, A.Jarrett, N.Pearce, K.Jones, C.Griffiths, M.Roberts, H.Jones, C.Furlow-Harris, C.Davies and T.Davies

Invitee: Councillor M.Harvey (Scrutiny Chair)

1. APPOINTMENT OF CHAIRPERSON

Agreed that Councillor R.G.Jones be appointed Chairperson for the meeting.

2. MINUTES OF PREVIOUS MEETING**Decision:**

That the minutes of the following meetings of Cabinet, be approved:

- 5 February 2020
- 12 February 2020
- 19 February 2020
- 5 March 2020
- 21 May 2020
- 25 June 2020
- 30 July 2020
- 2 September 2020

3. **CORPORATE PLAN 2019/2020 - ANNUAL REPORT**

Decisions:

1. That the following documents be commended to Council for approval:
 - Draft Corporate Plan 2019-22 Annual Report (full progress report)
 - Draft Corporate Plan 2019-22 Annual Report (summary report)
 - Corporate Plan Key Performance Indicators 2019-20
2. That it be recommended to Council that no changes be made to the Council's well-being objectives at this time.
3. That the Leader of Council be given delegated authority to make such changes as may be needed to the Annual Report prior to publication, provided that such changes do not materially alter the content of the document considered by Council.

Reason for Decisions:

To meet the statutory requirements set out in the Local Government (Wales) Measure 2009 and the Well-being of Future Generations (Wales) Act 2015.

Implementation of Decisions:

The decisions will be implemented after the three day call in period.

4. **CORPORATE COMMENTS, COMPLIMENTS AND COMPLAINTS POLICY**

Decision:

That the amended Corporate Comments, Compliments and Complaints Policy as attached at Appendix 1 to the circulated report, be approved.

Reason for Decision:

To ensure the Council has a consistent approach for the handling of comments, compliments and complaints across the Council.

Implementation of Decision:

The decision will be implemented after the three day call in period.

5. **CHANGES TO MEMBER REPRESENTATION**

Decision:

That Councillor S.Purseley be appointed to fill the vacancy on the Voluntary Sector Liaison Forum.

Reason for Decision:

To update the Council's membership arrangements.

Implementation of Decision:

The decision is for immediate implementation. The Chairperson of the scrutiny committee had agreed to this course of action. There would therefore be no call in of this decision.

6. **OMBUDSMAN'S ANNUAL REPORT 2020**

Members queried the number of complaints relating to 'complaints handling', and Officers explained this was five.

Decision:

That the report be noted.

7. **KERBSIDE TEXTILE COLLECTIONS**

It was emphasised by Members that fly tipping was always unacceptable and was never inadvertently carried out.

Members accepted the recommendation from the earlier Scrutiny Committee, to extend the notice period to local residents from one month to two months, as detailed in **bold** at decision 1 below.

Decisions:

1. That the Council ceases to collect textiles at the kerbside and alters it's marketing accordingly, **providing two months' notice to the general public.**
2. That officers work with any local outlets who are prepared to receive and/or pay for textiles, to help promote the growing number of community events and the use of 'bring' facilities such as those provided at council Household Waste Recycling Centres.

Reason for Decisions:

To determine the way forward with respect to the kerbside collection of textiles.

Implementation of Decisions:

The decisions will be implemented after the three day call in period.

CHAIRPERSON

EXECUTIVE DECISION RECORD

CABINET

17 SEPTEMBER 2020

Cabinet Members:

Councillors: R.G.Jones (Chairperson), C.Clement-Williams, D.Jones, E.V.Latham, P.A.Rees, P.D.Richards, A.Wingrave and L.Jones

Officers in Attendance:

S.Phillips, A.Evans, A.Jarrett, H.Jenkins, N.Pearce, K.Jones, C.Griffiths, C.Furlow-Harris, R.Headon, S.Blewett, C.Davies, J.Woodman-Ralph and T.Davies

1. **APPOINTMENT OF CHAIRPERSON**

Agreed that Councillor R.G.Jones be appointed Chairperson for the meeting.

2. **DECLARATIONS OF INTEREST**

The following members made declarations of interest at the commencement of the meeting:

Councillor D.Jones	Re Council Representation on Outside Bodies, as she is a Council representative on NPT Black and Minority Ethnic Community Association and a Trustee for NPTCVS. She considered her interest as prejudicial and left the meeting at the start of the item.
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- | | |
|-------------------------|---|
| Councillor L.Jones | Re Council Representation on Outside Bodies, as she is a Council representative on NPT Black and Minority Ethnic Community Association. She considered her interest as prejudicial and left the meeting at the start of the item. |
| Councillor P.D.Richards | Re Council Representation on Outside Bodies, as he is the Councils representative on the Board of Care and Repair Western Bay. He considered his interest as prejudicial and left the meeting at the start of the item. |

3. **STRATEGIC EQUALITY PLAN 2020-2024**

Members noted that the first part of the Strategic Equalities Plan 2020-2024 needed to be published before October 2020.

Decisions:

1. That the Strategic Equality Plan 2020-2024, as attached at Appendix 1 to the circulated report, be commended to Council for approval.
2. That the Cabinet Member for Corporate Services and Equalities be given delegated authority to make such changes as may be needed to the Strategic Equality Plan prior to its publication, provided that such changes do not materially alter the content of the document considered by Council.

Reason for Decisions:

To meet the statutory requirements set out in the Equality Act 2010 (Statutory Duties) (Wales) Regulations 2011.

Implementation of Decisions:

The decisions will be implemented after the three day call in period.

Consultation:

This item has been subject to external consultation.

4. **COUNCIL REPRESENTATION ON OUTSIDE BODIES**

(At this point in the meeting, Councillors D.Jones, L.Jones and P.D.Richards reaffirmed their interests in this item, and left the meeting for the discussion and voting thereon.)

Decisions:

1. That Neath Port Talbot County Borough Council no longer nominate representatives to the boards of organisations funded by the Council, and where participation in the boards of those organisations was voluntary.
2. That Neath Port Talbot Council for Voluntary Services, Neath Port Talbot Care and Repair, Neath Business Improvement District, Port Talbot Business Improvement District and The Neath Port Talbot Black and Ethnic Minority Community Association be notified that the current Council appointees wish to resign from these Organisations and from the date of such resignation, Neath Port Talbot County Borough Council no longer propose to appoint elected member representatives to these Organisations.

Reason for Decisions:

To ensure that suitable governance arrangements are in place in respect of the Council's relationship with its funded Organisations and to prevent members appointed being placed in a position of conflict between their duties as members of these Organisations and elected members of the Council.

Implementation of Decisions:

The decisions will be implemented after the three day call in period.

5. **TAI TARIAN REPRESENTATION CHANGES**

Members agreed to change the word "two' member appointments' to "allocated' member appointments', as shown in bold below.

Decision:

That Neath Port Talbot County Borough Council notify Tai Tarian Limited that its **allocated** member appointments wish to resign from the voluntary board, and from the date of such resignation, Neath Port Talbot County Borough Council no longer propose to appoint elected member representatives to the voluntary board of Tai Tarian Limited.

Reason for Decision:

To ensure that suitable governance arrangements are in place in respect of the Council's relationship with Tai Tarian Limited and to prevent members appointed being placed in a position of conflict between their duties as members of the voluntary board and elected members of the Council.

Implementation of Decision:

The decision will be implemented after the three day call in period.

CHAIRPERSON

NEATH PORT TALBOT COUNTY BOROUGH COUNCIL

Cabinet
21st October 2020

REPORT OF HEAD OF TRANSFORMATION ANDREW THOMAS

MATTER FOR DECISION

WARDS AFFECTED: Alltwen, Godre'rgraig, Pontardawe, Rhos Trebanos, Ystalyfera,

STRATEGIC SCHOOL IMPROVEMENT PROGRAMME - PROPOSAL TO ESTABLISH AN ENGLISH- MEDIUM 3-11 SCHOOL TO REPLACE ALLTWEN, GODRE'RGRAIG AND LLANGIWG PRIMARY SCHOOLS

Purpose of report

1. To obtain Cabinet approval to consult on a proposal to establish an English-medium 3-11 school with a specialist learning support centre, in new build premises to accommodate pupils from the current catchment areas of Alltwen Primary, Godre'rgraig Primary and Llangiwg primary, all of which will close on 31st August 2024.

Executive summary

2. The Council is responsible for promoting high educational standards and for delivering efficient primary and secondary education. This will involve reviewing the number and type of schools the Council has in its area and assessing whether or not best use is being made of resources and facilities in order to ensure future provision is sustainable.
3. Neath Port Talbot 's 21st century schools Band B Strategic Outline Plan included a proposal for a new build 3-16 middle school,

however following informal discussions with stakeholders it was decided that the scheme should be amended.

4. It is proposed therefore to establish an English-medium 3-11 school with a specialist learning support centre, in new build premises to accommodate pupils from the current catchment areas of Alltwen Primary, Godre'rgraig Primary and Llangiwg primary, all of which will close on 31st August 2024.
5. It is proposed that the new school will be built on land in Council ownership at Parc Ynysderw, Pontardawe and that it will form part of learning, health and wellbeing community campus made up of Cwmtawe Community School and Pontardawe Leisure Centre. The campus will be further enhanced by the addition of a new build swimming pool on the site to complement the current health and wellbeing offer for pupils and the wider community.
6. The new build will be funded jointly from Welsh Government 21st century School Programme capital grant monies and from the Council's prudential borrowing capacity. Welsh Government 21st Century Schools Programme capital grant funding has been approved, in principle.

Background

7. The Council is responsible for promoting high educational standards and for delivering efficient primary and secondary education. Having the right schools in the right place and ensuring that they are fit for the 21st century learner is the challenge facing the Council. Achieving this will involve reviewing the number and type of schools the Council has in its area and assessing whether or not best use is being made of resources and facilities.
8. Implementing the Council's Strategic School Improvement Programme (SSIP) involves reviewing existing provision and determining the number and type of schools needed to deliver education effectively and efficiently across the County Borough. It will most likely lead to substantial change involving opening new schools, closing existing schools, merging or amalgamating schools, federating schools and promoting new initiatives that support collaborative working between schools.
9. The Council has determined to review its provision on the basis of:

- educational standards
 - the need for places and the accessibility of schools
 - the quality and suitability of school accommodation
 - effective financial management
10. Neath Port Talbot Council's 21st Century Schools Band B proposal submitted to Welsh Government included a project for a new build school in the Swansea Valley. The initial plans were to establish an 'English-medium, 'all-through' 3-16 school with capacity for 1284 pupils aged 11-16 and 750 pupils aged 3-11 (incl. Nursery), and would require the closure of Alltwen, Godre'rgraig, Llangiwg and Rhydyfro primary schools resulting in a reduction in backlog maintenance and accessibility costs of c. £2.7m with education for the pupils being provided at a whole new (primary phase) build on the site of the existing Cwmtawe Comprehensive school'.
 11. Additional scoping work has been undertaken, alongside a review of the number of pupils residing in the Swansea Valley area which now makes it necessary to reconsider the original planned scheme.
 12. As a result it is proposed that the original scheme is amended to become a new build English-medium school for 630 full time and 140 part time nursery pupils aged 3-11 with a specialist learning support centre, in new build premises to accommodate pupils from the current catchment areas of Alltwen Primary, Godre'rgraig Primary and Llangiwg Primary, all of which will close on 31st August 2024.

Reasons for the Amended Proposal

– Informal Consultation with Stakeholders

13. Informal consultation took place with local ward Members for the Swansea Valley area along with the AM and MP for Neath Constituency, and headteachers and Chairs of Governors for all of the schools in the area - Welsh and English-medium, primary and secondary.
14. The meetings were held to better understand the requirements of the different communities in the area and to gather information which could help shape the development of a proposal for the new school.

15. Positive comments were received about the idea of a new build primary school although there were consistent concerns raised about a 3-16 (all through) model.
16. Further concerns were noted regarding the possible effect on nursery pupils, transport and travel arrangements, the management of traffic in and around the possible site, the effect that losing a school could have on its community and the size and composition of a new school.
17. Comments were also received about possible impacts on the Welsh-medium schools in the area and the impact on the development of the Welsh language as a whole.

– **A 3-16 Model**

18. The development of ‘all-through’ schools within Neath Port Talbot is a distinctive response to specific circumstances where school organisational change is required. As a concept, it has not been adopted as a political imperative nor is it a Council policy directive.
19. The ‘all-through’ school is recognised as a transformational model of education delivery that has potential teaching and learning benefits together with operational and financial efficiencies. Notwithstanding the benefits and efficiencies that can be achieved with this approach, it is acknowledged that there is no single ‘all-through’ model that is fit for purpose in all school organisation settings or that the ‘all-through’ approach is an appropriate solution for every situation.
20. The new proposed new build primary is likely to be situated on available land at Parc Ynysderw, Pontardawe in close proximity to Cwmtawe Community School.
21. To create an ‘all through’ school in this particular situation would require the closure of Cwmtawe Community School as well as the identified primary schools, and subsequently necessitate opening a new establishment for pupils aged 3-16 with a new Governing Body, new Headteacher and deputy head teacher(s) posts (which would need to be advertised nationally in line with Council policy) and with a suitable staffing structure to facilitate teaching and learning across both the primary and secondary phases.
22. Cwmtawe Community School is a successful and popular secondary school; reorganisation is likely to impact on the settled leadership

structure that exists and may cause unnecessary uncertainty and anxiety for the school community.

23. The initial 'all through' proposal focussed on new build premises only for primary aged pupils and as such Cwmtawe Community School would remain in its current building. This would mean that the two phases would effectively be on a split site, making cross phase working more difficult than it would be in one building and so creating further logistical and leadership challenges.
24. No support was expressed during the informal consultation process for a 3-16 school in the Swansea Valley and there has been strong opposition to involving Cwmtawe Community Comprehensive in reorganisation proposals.
25. While it is recognised that an all through school can deliver many benefits, it is also the case that many of these benefits can be achieved through improving and strengthening partnership working between the primary and secondary phases. This can be achieved more easily when the schools involved are in close proximity as would be the case in this proposal.

The case for a 3-11 Model

26. There are 7 primary schools in the Swansea Valley area. Alltwen, Llangiwg, Rhydyfro, Godre'rgraig and Rhos Primaries provide English-medium primary education while YGG Trebannws and YGG Pontardawe provide primary education through the medium of Welsh.
27. In the last 10 years pupil numbers have increased significantly in the Swansea Valley area, with over 160 extra primary aged pupils attending either Welsh or English-medium schools. The pupil population is transient across the primary schools. Data indicates that pupil numbers can alter significantly over a short period of time, with substantial numbers of pupils attending from outside their schools catchment area, but from within the wider Swansea Valley area.

Table 1: Pupil Numbers

English-medium 3-11	Pupil numbers
Rhos	150
Alltwen	231
Llangiwg	136
Rhydyfro	167
Godre'rgraig	153

PLASC 2020

28. There is a risk that establishing a 750 place school would not create enough pupil places to accommodate all the pupils from the schools that were originally considered for inclusion in the ‘all through’ scheme, namely Alltwen, Llangiwg, Rhydyfro and Godre’rgraig Primary schools. There is also a need to ensure that there are sufficient places for pupils who reside in the catchment area of the proposed new school but attend elsewhere and who would be able to claim a place should they wish to return to their catchment school. This potentially further increases the size of the school.

Table 2: Schools and Catchment Pupil Percentages

English Medium Schools	Percentage of pupils in catchment				
	Alltwen	Llangiwg	Rhydyfro	Godre’rgraig	Rhos
Alltwen	58%	19	6	6	4
Llangiwg	13	66%	5	11	1
Rhydyfro	4	22	61%	5	1
Godre’rgraig	1	6	1	82%	0
Rhos	15	5	7	2	64%

Data source: PLASC 2019

29. The Local Development Plan contains details of a number of new housing developments, 14 of which are planned for the Swansea Valley areas which could generate over 700 units by 2026. This could see a further increase in pupil numbers in the area adding to the numbers of pupils the proposed new school would need to accommodate.
30. Generally the proposal for a new English-medium school was welcomed by consultees, but little support was expressed for an amalgamation of Alltwen, Llangiwg, Rhydyfro and Godre’rgraig Primary schools into one 750 place primary school.
31. Alltwen and Llangiwg Primary schools are the nearest schools to the prospective site, both within 2 miles. Godre’rgraig Primary School is approximately 3.2miles away from the prospective site.
32. Total backlog maintenance and accessibility costs for all three schools amounts to amount to over £2m. Additionally Llangiwg Primary operates across two sites a short distance apart.

33. A new build school to accommodate pupils currently attending Alltwen, Godre'rgraig and Llangiwg Primary schools and those residing in the new school catchment attending English-medium schools in Neath Port Talbot or elsewhere who could claim a place would total 781 places (including part time nursery), should all pupils wish to attend.

The case for including a Learning Support Centre (LSC)

34. The Council provides for the pupils of Neath Port Talbot who require specialist support for their educational needs at two community special schools and at learning support/ inclusion centres attached to community primary/secondary schools.
35. Recent work on reviewing the number and type of planned places and assessment provision across Neath Port Talbot has indicated that there is a need for extra places in the areas of Autistic Spectrum Disorder (ASD) and Social, Emotional and Behavioural Difficulties (SEBD), and for those early years pupils with identified additional learning needs which require further assessment.
36. It is proposed that the new school includes an LSC for up to 16 primary aged pupils with a statement of ASD. Including this provision in the new build will ensure that pupils are provided with purpose built, 21st century standard facilities, with the aim of ensuring best possible outcomes for pupils, and will also address identified need for further provision for pupils with ASD, specifically primary aged pupils.
37. Currently for primary age pupils with ASD who need specialist support or assessment, provision is made at Gnoll Primary (18 places), Maesmarchog Primary (18 places) and Waunceirch Primary (17 places). Secondary provision is available at Cwmtawe Community School (13 places), Ysgol Bae Baglan (29 places), Ysgol Hendrefelin (16 places) and most recently at a newly established provision at Dwr Y Felin Comprehensive school (14 places) . The high demand at both primary and secondary level is placing pressure on existing provisions which are consistently full
38. Data analysis suggests that a number of pupils within the Swansea Valley travel to gain additional learning support in specialist units elsewhere within Neath Port Talbot. Creating a new provision in the proposed new school would provide additional places in an area where need has been identified.

The Proposal

39. Taking account of the above considerations it is proposed to establish an English-medium 3-11 school with a specialist learning support centre, in new build premises to accommodate pupils from the current catchment areas of Alltwen Primary, Godre'rgraig Primary and Llangiwg primary, all of which will close on 31st August 2024.
40. It is proposed that the new school will be built on land in Council ownership at Parc Ynysderw, Pontardawe and that it will form part of learning, health and wellbeing community campus made up of Cwmtawe Community School and Pontardawe Leisure Centre. The campus will be further enhanced by the addition of a new build 25 metre, 6 lane swimming pool with additional learner pool on the site, to complement the current health and wellbeing offer for pupils and the wider community.
41. The new English-medium community primary school for boys and girls aged 3-11 years will accommodate 630 full-time pupils and 140 part-time (70 a.m./70 p.m.) nursery age pupils. It will be managed with one head teacher and one governing body and will have one budget allocation and one group of staff.
42. The new school will serve the combined catchment areas of Alltwen, Llangiwg and Godre'rgraig primary schools. Pupils from the three existing schools will automatically transfer to the new school subject to parental preference.
43. The new school will provide primary education for children aged 3-11 in a new build 21st century facility which will provide a stimulating teaching and learning environment in state of the art facilities .
44. Additionally the new school will provide support for pupils through the establishment of an LSC for 16 pupils with a statement of ASD. It will also provide the opportunity to become a community hub for the area, building on the work already being undertaken by other well established primary school LSCs.
45. The new build will be funded jointly from Welsh Government 21st century School Programme capital grant monies and from the Council's prudential borrowing capacity.

46. The scheme will also include a new build 25 metre 6 lane swimming pool with additional learner pool, to further enhance the physical activity and wellbeing opportunities for pupils who currently attend Alltwen, Godre'rgraig and Llangiwig primary schools and Cwmtawe Community School, as well as pupils attending nearby YGG Trebannws and YGG Pontardawe.
47. Furthermore the facilities will provide sustainable opportunities for swimming curriculum development for potentially 2500 pupils aged 3-16 in the nearby communities. The swimming pool will complement the current school and community facilities on site to deliver a 21st century health and wellbeing offer for pupils aged 0-16 and for wider community use, making it a sustainable delivery model.
48. The combined new build School, specialist ASD provision and pool will form part of a learning, health and wellbeing community campus at the Parc Ynysderw site, complementing the existing Cwmtawe Community School and Pontardawe Leisure Centre provision. In locating the new build facilities close to Cwmtawe Community School the development will enable pupils and staff from both schools to benefit from increased partnership working, made easier due to their close proximity.

Information about the proposed new school

49. The proposed new, 21st century build, English-medium 3-11 primary school will provide for up to 630 full-time primary age pupils, 140 part-time (70 a.m./70 p.m.) nursery age pupils. This will deliver sufficient accommodation for the total combined forecasted pupil numbers, including potential growth in pupil population. For the purpose of consultation, the proposed admission number for the new primary is 90.
50. A new build school provides the opportunity to deliver a stimulating teaching and learning environment in state of the art, 21st Century facilities that will impact positively on the self-esteem and well-being of pupils and will aim to improve the learning outcomes for all children across the ability range.
51. With a new school comes more choices and improved opportunities because there is more space and better facilities. In the Estyn report of 2007, 'An evaluation of performance of schools before and after moving into new buildings or significantly refurbished premises', it is

reported that the attainment and achievement of pupils improves significantly when they move into new or significantly refurbished buildings, particularly when schools are in areas with high levels of social and economic deprivation.

52. The new school will ensure that pupils have adaptable ICT facilities suitable for learning in the 21st century. Mobile technology will be integrated with a sound pedagogical base to provide pupils with enhanced learning experiences, equipping them with the key skills and motivation needed to raise standards.
53. The new build school will be an exciting place for pupils and staff both internally and externally. It will have spacious, light and airy classrooms, with access to a range of high quality and appropriate spaces for social interaction. The 2015 report, 'Clever Classrooms', found that well designed schools can significantly boost children's academic performance in reading, writing and maths. The school will allow for the delivery of a pupil centred, inclusive and skills based curriculum that extends to social and sporting activities. It will aim to promote equality and inclusion by providing facilities, sporting and cultural, which can be accessed by pupils and which the school can share with the community.
54. A new build of this kind is a significant investment in the future of the young people of the area and clearly signals that the Council is serious about making schools fit for purpose places of learning.

Information about the proposed LSC

55. The new school will include an LSC which will provide learning support for pupils with ASD for up to 16 pupils who are in receipt of a Statement of SEN.
56. The provision will be managed by the school and be under the school's governance. However it will be a provision recognised by the Council as reserved for pupils with ALN and pupils admitted to the provision would be in addition to the admission number of the school. Admission to the provision would be via a special admission panel of the Council and specific entry and exit criteria would apply.
57. Pupils at the proposed provision will benefit from being taught by specialist staff, experienced in working with pupils with ASD needs.

There is also the possibility that mainstream pupils with ASD could also benefit from the expertise available.

58. The provision will alleviate the current pressure to address demand for places for pupils with more complex needs, avoiding potential costly out of county placements and allowing opportunities for children to access learning within their local community and will complement the specialist provision and support already available within the County Borough.

Information about the proposed pool

59. In addition to the new build primary school and specialist ASD provision, it is also proposed to include as part of the scheme a new build 25metre, 6 lane swimming pool with additional learner pool to replace the existing Pontardawe Swimming Pool. The pool will provide an additional facility alongside the leisure centre, revitalising and increasing the health and well-being facilities in the area.
60. The combined new build school, specialist ASD provision and leisure facilities will form part of a learning, health and wellbeing community campus at the Parc Ynysderw site, complementing the existing Cwmtawe Community School and Pontardawe Leisure Centre provision. The pool is currently used by some schools in the area but this scheme aims to increase usage by schools and by the wider community due to its improved co-location.
61. Pontardawe Swimming Pool was built in 1974. The latest condition survey from August 2014 indicated that while the building was in reasonable condition, the core building services have exceed their recommended anticipated lifecycle. A total of £1,221,783 of maintenance works was identified as being required between 2015 and 2022. Due to the complexity of the works required the recommendation at that time was that the vast majority of the works be completed within one single phase in order to reduce the overall disruption to the facility. To date due to Capital expenditure pressures and logistics surrounding phasing, these works have not been completed.
62. Given the relative poor condition and age of the current facilities, aligned with the space available at the proposed Parc Ynysderw site, the Council are presented with an opportunity to integrate the pool and school facilities creating a new sustainable school and

community asset. Inclusion of a pool at the site will further enhance the physical activity and wellbeing opportunities open to pupils who currently attend Alltwen, Godre'rgraig and Llangiwig Primary schools as well as those at Cwmtawe Community School which is also closely located to the new build site, and those of other nearby schools including YGG Trebannws and YGG Pontardawe.

63. The facility will also provide sustainable opportunities for swimming lessons and participation to residents of all ages within the nearby communities. This campus will provide modern leisure facilities where people can enjoy physical activity, and where physical, mental health and wellbeing is positively promoted throughout local communities.
64. The Welsh Index of Multiple Deprivation (WIMD) data states that six out of the eight LLSOA's that serve the Swansea Valley are in the 50% most deprived areas of Wales, including the employment, health, education and access to services domains. The creation of the learning campus will provide all members of the Swansea Valley community with modern, fit for purpose educational, health and leisure facilities, providing a community focal point for intergenerational health, wellbeing and cohesion in the wider Pontardawe area. It will help to deliver the Council's aim of improving the health and wellbeing of all people living in Neath Port Talbot and reducing the gap between the least and most healthy.

Information about the existing schools

Alltwen Primary School

65. Alltwen Primary School is an English-medium community school serving boys and girls aged 3-11 years. It is situated in the village of Alltwen approx. 0.7 miles from the possible site of the new school.

– Pupil Numbers

66. As at January 2020 there were 200 full-time and 31 part-time (nursery) pupils on roll. With the physical capacity to accommodate 239 full-time and 30 (30a.m/ 30pm) part-time (nursery) pupils, the school has a surplus capacity of 16% (39 full-time pupil places). Forecasts, based on current school admission trends, from January 2020 to January 2021 suggest a slight increase in pupil numbers.

Table 1

Alltwen Primary School				
		Jan 2020		Jan 2021
	School capacity	Actual Pupil Numbers	Surplus places	Projected Pupil Numbers
Full-time	239	200	16% (39)	203
Part-time (Nursery)	30	31	-3% (-1)	33

67. The table below shows pupil numbers over a 5 year period:

Table 2

Alltwen Primary School						
School Census Jan 2016 – 2020 + Sept. '20 roll						
Year	16	17	18	19	20	Sept.20
Pupil numbers	215	223	234	240	231	211
Full Time	184	179	197	208	200	203
Part Time	31	44	37	32	31	8

Notes:

- Capacity: Taken from 19-20 Capacities
- Actual Pupil numbers: Taken from PLASC Report Jan 2020
- School Census Data '16-'19: Taken from PLASC – Actual.

Quality and standards in education

68. Alltwen Primary School was last inspected in October 2018 and Estyn reported that it was a school with many good features, awarding good judgements in the 5 inspection areas. The school has shown recent improvement and the National Categorisation System placed the school in the yellow support category from 2016/17-2017/18, with an upward move in 2018/19 to the green category which continued into 2019/20, which recognises it as an effective school which has secured good levels of learner outcomes in key performance indicators.

Standards

69. Alltwen Primary school has 231 pupils on roll. The 'Academic-Achievement-pupils-aged-4-14-core-subjects-2019' indicates that the school has a lower than average number of children in receipt of free school meals (17%) when compared to other schools in Neath Port Talbot (23%) and similar to schools across Wales (20%). There are also a higher than average number of children who have been identified as having additional learning needs (37%) when compared with Neath Port Talbot (24%) and all Wales (23%).

70. Standards at the end of Foundation Phase are adequate in all areas of learning over three years, with 56% of pupils attaining the Foundation Phase indicator in 2019 (outcome 5 or higher in all three

core areas of learning). This is lower than schools across Neath Port Talbot at 68% and all Wales at 80%.

71. At Key Stage 2 pupil outcomes are deemed to be adequate in all subjects over three years, with 76% of pupils attaining level 4 or higher in all three core subjects in 2019. This was lower than schools across Neath Port Talbot at 82% and all Wales at 88%.
72. Wellbeing and attitudes to learning of pupils was judged to be 'good' in the recent Estyn report (October 2018) in that: 'Pupils' wellbeing is a very strong aspect of the life of Alltwen School. Nearly all pupils feel safe, happy and secure in school.'
73. Attendance has been consistent, with current data showing a percentage of 94.7% for 2019/20, where nearly all pupils and their parents understand the importance of regular attendance at school. (Estyn October 2018).

Teaching and Learning

74. Estyn, in 2018, reported that across Alltwen Primary School effective teaching promotes pupils' good progress and as a result, relationships are positive and respectful, many classrooms are productive and orderly, and most pupils want to learn.
75. The quality of teaching and learning experiences in Alltwen Primary was judged to be good overall and there are well-planned opportunities to develop pupil's oracy and reading skills in a wide range of contexts across the curriculum. There are also carefully-thought-through opportunities to develop pupils' ICT skills and Welsh language skills effectively, although numeracy skills needs to be developed through other subjects.

Care, Support and Guidance

76. Estyn reported that care, support and guidance were good, noting that the Headteacher has established an inclusive and caring ethos that permeates the daily life of the school. This has improved pupils' wellbeing very effectively.
77. Estyn also report that there is a wide range of valuable provision to meet the needs of pupils who have additional needs.
78. Alltwen Primary currently has skilled teaching assistants providing high quality care and support to ensure that pupils with a range of

additional needs integrate seamlessly into the daily life of the school, this led Estyn to report that, 'Adults know and care for their pupils well, particularly those who may be vulnerable to underachievement.' Increased staffing with a breadth of experience can be utilised to help target and support children as appropriate.

Leadership and Management

79. In 2018, Estyn judged Alltwn Primary school's leadership and management to be good, reporting that: 'The Headteacher is a well-motivated leader who provides a clear, shared and strategic vision for the school.'
80. In 2019, the Autumn Core Visit report also found that: 'The headteacher is a well-motivated leader who provides a clear, shared and strategic vision for the school. This focuses on ensuring the wellbeing of pupils and staff in a supportive and positive learning environment.'

Quality of accommodation

81. Alltwn Primary school occupies a prominent elevated position on Alltwn Hill, Alltwn, Pontardawe and whilst contained within a single enclosed site, operates between two separate buildings (a short distance apart within the site boundary).
82. The most recent building condition survey (November 2018) reports that the building is overall in a fair condition, with investment needed internally and externally.
83. A new boiler has recently been installed, however the heating distribution system is old and inefficient and has exceeded its practical and recommended life span, and will need to be renewed.
84. Overall the site is graded C+ for condition i.e. the building is operational but major repairs or replacement will be needed.
85. Backlog maintenance and accessibility costs amount to £611,000.

Godre'rgraig Primary School

86. Godre'rgraig Primary School is an English-medium community school serving boys and girls aged 3-11 years. It is situated in the village of Godre'rgraig approx. 3.2 miles from the possible site of the new school.

87. In July 2019 Godre'rgraig Primary was relocated temporarily from Godre'rgraig to Parc Ynysderw, adjacent to Cwmtawe Community School after geological experts found there was a potential landslide risk to the school's playground.
88. Earth Science Partnership (ESP), the experts commissioned by Neath Port Talbot Council, reported a medium level risk from a quarry spoil tip near the school after the Council asked them to extend their extensive landslide risk investigation work carried out in nearby Panteg, Ystalyfera.
89. Further work has revealed that the risk remains and that it would be unsafe for staff and pupils to return to the school. The new build school provides the opportunity for Godre'rgraig Primary pupils to be permanently relocated and to benefit from the 21st century facilities provided.

– **Pupil Numbers**

90. As at January 2020, there were 135 full-time and 18 part-time (nursery) pupils on roll. With the physical capacity to accommodate 162 full-time and 19 (19 am/ 19 pm) part-time (nursery) pupils, the school has a surplus capacity of 17% (27 full-time pupil places). Forecasts, based on current school admission trends, from January 2020 to January 2021 suggest a slight increase in pupil numbers.

Table 5

<i>Godre'rgraig Primary School</i>				
		<i>Jan 2020</i>		<i>Jan 2021</i>
	School capacity	Actual Pupil Numbers	Surplus places	Projected Pupil Numbers
<i>Full-time</i>	162	135	17% (27)	134
<i>Part-time (Nursery)</i>	19	18	5% (1)	22

91. The table below shows pupil numbers over a 5 year period:

Table 6

<i>Godre'rgraig Primary School</i>						
<i>School Census Jan 2016 – 2020 + Sept. '20 roll</i>						
<i>Year</i>	16	17	18	19	20	<i>Sept. 20</i>
<i>Pupil numbers</i>	138	147	156	159	153	144
<i>Full Time</i>	114	122	134	134	135	136
<i>Part Time</i>	24	25	22	25	18	8

Notes:

- Capacity: Taken from 19-20 Capacities
- Actual Pupil numbers: Taken from PLASC Report Jan 2020
- School Census Data '16-'19: Taken from PLASC – Actual.

– **Quality and Standards in Education**

92. Godre'rgraig Primary School was last inspected in June 2017 and Estyn reported that it was a school with many good features, awarding good judgements in the three inspection areas and awarded a good for current standards and a good for prospects for improvement. The school is showing improvement and the National Categorisation System continues to place the school in the Yellow support category since 2015/16 through to 2019/20, which recognises it as an improving school which is beginning to secure good levels of learner outcomes in key performance indicators.

Standards

93. Godre'rgraig Primary school has 153 pupils on roll. The All Wales Core Data '*Academic-Achievement-pupils-aged-4-14-core-subjects-2019*' indicates that the school has a lower than average number of children in receipt of free school meals (21%) when compared to other schools in Neath Port Talbot (21%). There are also a higher than average number of children who have been identified as having additional learning needs (35%) when compared with Neath Port Talbot (24%).

94. Standards at the end of Foundation Phase are adequate in all areas of learning over three years 68% of pupils attained the Foundation Phase indicator in 2019 (outcome 5 or higher in all three core areas of learning). This is equal to schools across Neath Port Talbot at 68% but below Wales at 80%.

95. At Key Stage 2 pupil outcomes are deemed to be adequate with all subjects over three years. However, in 2019, 93% of pupils attained level 4 or higher in all three core subjects which was above the local authority at 82% and all Wales at 88%.

96. Wellbeing was judged to be 'good' in the latest Estyn report (June 2017) in that: 'Pupils are confident that all staff care for them and will sort any issues quickly and fairly;' and '.....a real strength of pupils, throughout the school, is the way that they work collaboratively and interdependently'.

97. Attendance had shown a steady improvement, and current 2019/20 data is at a five year high at 94.7%. Estyn in June 2017 stated that, 'staff promote the importance of good attendance thoroughly. Pupils benefit from a range of strategies and rewards to encourage good attendance.'

Teaching and Learning

98. Estyn in 2017 report that Godre'rgraig Primary School provides learning experiences that are adequate across the school. The quality of teaching in Godre'rgraig Primary was judged to be good overall with nearly all teachers matching work well to the wide range of needs and abilities in their class. This is a strength of teaching across the school.
99. Care, support and guidance were also judged 'good' with Estyn (June 2017) stating that, 'the school promotes a caring environment that develops pupils' health and wellbeing effectively,' with 'the school's attention to ensuring that pupils attain high levels of emotional wellbeing is central to its caring ethos. New pupils to the school settle quickly and feel secure. This is a strength of the school.'
100. Provision for pupils who have additional learning needs at Godre'rgraig Primary School is strong. Effective procedures enable staff to identify pupils' needs at an early stage. The school makes successful use of the expertise of staff to implement a wide variety of useful intervention strategies. As a result, pupils with additional learning needs make good progress against their targets.

Leadership and Management

101. In 2017, Estyn judged Godre'rgraig Primary school's leadership and management to be good, reporting that: 'The headteacher has a clear vision for the school and she shares this effectively with all stakeholders. All staff work together successfully to ensure that standards and pupils' wellbeing improve continually.'
102. In 2019, the Autumn Core Visit report also found that, 'The headteacher, supported by the deputy headteacher provide strong leadership for the school. The school development plan is a detailed, useful document. There is an appropriate balance between development and monitoring activities.'

Quality of Accommodation

103. Godre'rgraig Primary school occupies a prominent elevated position on Graig Road, Ystalyfera and whilst contained within a single enclosed site operates between two separate buildings (a very short distance apart within the site boundary) for Foundation Phase and KS2

104. The most recent building condition survey (November 2018) reports that the buildings are in poor to fair condition and are categorised as condition grade C-.
105. The school is circa 100 years old. Externally stonework surfaces are scaling, hard play surfaces require resurfacing and works are required to the covered play area. Internally the building requires general refurbishment to lift the dated appearance. The school kitchen also requires upgrading and refurbishing whilst the boiler and heating distribution systems have reached the end of their lifespan and require renewal.
106. The combined total backlog maintenance and accessibility costs for Godre'rgraig Primary school amount to £740,050
107. Since July 2019 Godre'rgraig Primary has been relocated from Godre'rgraig to temporary buildings at Parc Ynysderw. These buildings are of a good standard and suitable for the purpose of accommodating primary aged pupils, however they are not intended for permanent use in the longer term.

Llangiwig Primary School

108. Llangiwig Primary School is an English-medium community school serving boys and girls aged 3-11 years. It is situated in the village of Ynysmeudwy approx. 1.3 miles from the possible site of the new school.

– Pupil Numbers

109. As at January 2020, there were 119 full-time and 17 part-time (nursery) pupils on roll. With the physical capacity to accommodate 147 full-time and 53 (53 am/ 53 pm) part-time (nursery) pupils, the school has a surplus capacity of 19% (28 full-time pupil places). Forecasts, based on current school admission trends, from January 2020 to January 2021 suggest a slight decrease in pupil numbers.

Table 3

<i>Llangiwig Primary School</i>				
		<i>Jan 2020</i>		<i>Jan 2021</i>
	School capacity	Actual Pupil Numbers	Surplus places	Projected Pupil Numbers
<i>Full-time</i>	147	119	19% (28)	109
<i>Part-time (Nursery)</i>	53	17	68% (36)	16

110. The table below shows pupil numbers over a 5 year period:

Table 4

<i>Llangiwg Primary School</i>						
<i>School Census Jan 2016 – 2020 + Sept. '20 roll</i>						
<i>Year</i>	<i>16</i>	<i>17</i>	<i>18</i>	<i>19</i>	<i>20</i>	<i>Sept.20</i>
<i>Pupil numbers</i>	<i>152</i>	<i>150</i>	<i>136</i>	<i>138</i>	<i>136</i>	<i>127</i>
<i>Full Time</i>	<i>130</i>	<i>124</i>	<i>120</i>	<i>124</i>	<i>119</i>	<i>109</i>
<i>Part Time</i>	<i>22</i>	<i>26</i>	<i>16</i>	<i>14</i>	<i>17</i>	<i>18</i>

Notes:

- Capacity: Taken from 19-20 Capacities
- Actual Pupil numbers: Taken from PLASC Report Jan 2020
- School Census Data '16-'19: Taken from PLASC – Actual.

– **Quality and standards in education**

111. Llangiwg Primary School was last inspected in January 2019 and Estyn reported that it was a school with many good features, awarding good judgements in 4 inspection areas and 1 inspection area as adequate and needing improvement. The school has, however, shown improvement and the National Categorisation System placed the school in the Red category in 2015/16 moving to the Amber support category in 2016/17 through to 2018/19, with a further upward move in 2019/20 to the Yellow support category, which recognises it as an effective school which has secured good levels of learner outcomes in key performance indicators.

Standards

112. Llangiwg Primary school has 136 pupils on roll. The All Wales Core Data Data 'Academic-Achievement-pupils-aged-4-14-core-subjects-2019' indicates that the school has a slightly lower than average number of children in receipt of free school meals (22%) when compared to other schools in Neath Port Talbot (24%). There are also a slightly lower than average number of children who have been identified as having additional learning needs (22%) when compared with Neath Port Talbot (24%).

113. Standards at the end of Foundation Phase are adequate in all areas of learning over three years, with 57% of pupils attaining the Foundation Phase indicator in 2019 (outcome 5 or higher in all three core areas of learning). This is lower than schools across Neath Port Talbot at 68% and all Wales at 80%.

114. At Key Stage 2 pupil outcomes are deemed to be adequate with all subjects over three years, with 71% of pupils attaining level 4 or higher in all three core subjects in 2019. This was lower than schools across Neath Port Talbot at 82% and all Wales at 88%.

Wellbeing and attitudes to learning

115. Wellbeing and attitudes to learning of pupils was judged to be 'adequate and needs improvement' in the recent Estyn report (January 2019) but stated that, 'Most (pupils) show high levels of engagement and approach tasks with enthusiasm..... and engage constructively with other pupils.'

116. Attendance has shown a steady improvement with current data for 2019/20 displaying a percentage of 94.5%. Estyn (January 2019) stated that 'most pupils are aware of the importance of attending school regularly and punctually.'

Teaching and Learning Experiences

117. Estyn in 2019 report that Llangiwig Primary School provides a broad, balanced curriculum enhanced by a range of experiences, activities and visits that consolidate and enrich the learning.

118. The quality of teaching and learning experiences in Llangiwig Primary was judged to be good overall (Estyn January 2019). Estyn state that, 'most teachers set appropriate expectations for pupils' achievement and motivate them to work hard.'

Care Support and Guidance

119. Estyn also reported that care, support and guidance were good, noting that, 'The school is a happy, inclusive and caring community, where pupils and staff show high levels of respect for each other.' Estyn also report that all staff responded sensitively to the social and emotional needs of pupils.

120. Estyn commented that, 'the school's provision for pupils with additional learning needs is good with well-focused learning plans with clear targets for pupils' development.'

121. The school has effective links with parents and carers and 'parents feel that the school's inclusive ethos nurtures all pupils and builds their confidence and self-esteem well.' (Estyn January 2019)

Leadership and Management

122. In 2019, Estyn judged Llangiwig Primary school's leadership and management to be good, reporting that: 'Leaders at all levels plan appropriately for the strategic development of the school and bring about worthwhile improvements.'

123. In 2019, the Autumn Core Visit report also found that: ‘The headteacher provides strong and purposeful leadership for the school and sets a clear strategic direction for improving the school. Senior leaders use an effective range of self-evaluation activities to evaluate the school’s performance and plan for improvement.’

– ***Quality of accommodation***

124. Llangiwg Primary School holds a prominent kerbside position on New Road, Ynsymudwy and operates across two distinct sites approximately 100m apart along the same road.

125. The main teaching block is constructed of stonework with concrete detailing and concrete cladding to the front whilst the separate nursery is housed in a demountable type building.

126. The most recent building condition survey (November 2018) reports that the nursery block has received moderate investment over recent years and is categorised as condition grade B, i.e. the building is sound, operationally safe and exhibits only minor deterioration.

127. The main block overall is in poor to fair condition and is categorised as condition grade C. The boiler system and distribution has reached the end of its practical and economic lifespan and needs to be replaced. Internally, timber floor coverings and kitchen areas require upgrading.

128. Overall the combined total condition and accessibility costs for Llangiwg Primary school across both sites amount to £701,550.

Options that have been considered

Option 1 – Status quo: maintain Alltwen, Godre’rgraig and Llangiwg Primary Schools, maintain the pool in its current position, do not establish a new ASD provision.

129. The Council has the responsibility for ensuring that it is making the best use of resources and facilities in order to deliver the very best educational opportunities for the children and young people.

130. Maintaining the three schools at their present sites is not considered to be the best use of resources or facilities.

131. Llangiwg Primary is currently located over two sites and has combined total backlog maintenance and accessibility costs of

£701,550. The main school has terraced, hard surface playgrounds and is on a confined site.

132. Alltwen Primary has a number of demountable buildings and requires backlog works for condition and accessibility amounting to £611,000.

133. Maintaining these schools on separate sites would lead to cost inefficiency and would mean that the potential benefits afforded by a new school build would not be realised. Increasing pupil numbers on one site by combining the three schools in a brand new purpose built facility would provide a far more effective use of public money as well as addressing surplus places and providing a 'state of the art' 21st Century teaching and learning environment delivering a positive impact on pupil outcomes.

134. As a result of the landslide risk Godre'rgraig Primary is currently housed in temporary demountable classrooms which are leased to the local authority, adjacent to Cwmtawe Community School. Maintaining status quo is not an option in this situation as although the temporary buildings are of a good standard and suitable for the purpose of accommodating primary aged pupils, the school could not remain in temporary, leased buildings indefinitely.

135. There is no direct capital cost associated with this option, although Godre'rgraig Primary would not be able to remain in temporary accommodation and a more permanent solution would be needed. It is likely that any permanent solution would incur significant capital costs.

136. If all three schools were to remain on their current sites the opportunity for a new, purpose built LSC would not present itself. It is unlikely that any of the three schools currently could accommodate the extra provision in the space available.

137. It is also the case that if the pool remains in its present position the opportunity to create a complementary facility alongside the leisure centre would be lost. Without the pool the vision of a community learning and wellbeing campus would also not be realised.

138. This option is not recommended as a basis for consultation

Option 2 – Establish a federation of Alltwen, Godre'rgraig and Llangiwg Primary schools, maintain the pool in its current position, do not establish a new ASD provision

139. In a federation schools are managed by a single governing body which takes decisions about matters such as staffing structures and expenditure. Under a single leadership and governance there are potential teaching and learning benefits, staff development opportunities and efficiencies that can arise from a federated arrangement. A single governing body will be able to pool resources, maximise staff expertise and share facilities.
140. A federation also presents the opportunity to co-ordinate curriculum provision and employ whole school teaching/learning strategies that will improve school performance and enhance educational experiences. In a federation schools remain separate legal entities retaining their name, registered pupils and budget, and can retain their existing sites.
141. Because of this, the federation would not necessarily achieve efficiencies through removing duplication, for example all three schools would be inspected separately by Estyn and there would be separate expenditure trails to manage and audit.
142. This option would also not resolve the need for Godre'rgraig Primary to be permanently relocated from the temporary buildings it currently occupies.
143. There is no direct capital cost associated with this option, although a permanent location would need to be found for Godre'rgraig Primary School which is likely to incur capital costs.
144. Whilst there is a significant cost to building a new primary school, the benefits of a purpose built 21st Century school outweigh any potential teaching and learning benefits and modest funding efficiencies that can arise from a federated arrangement between the three schools. In addition, federation would not remove the issues of surplus capacity, confined and restricted sites and significant repair and maintenance costs, or remove the need for a permanent solution to Godre'rgraig Primary School's need for relocation.

145. A federation does not provide the opportunity for a new, purpose built LSC. It is unlikely that any of the three schools currently could accommodate the extra provision in the space available.

146. It is also the case that if the pool remains in its present position the opportunity to create a complementary facility alongside the leisure centre would be lost. Without the pool the vision of a community learning and wellbeing campus would also not be realised.

147. This option is not recommended as a basis for consultation.

Option 3 – Close two of the schools and transfer all pupils to the remaining school, maintain the pool in its current position, do not establish a new ASD provision.

148. This option would prevent pupils and staff from benefitting from a new, purpose built school, meaning that recognised advantages from a modern learning environment would not be realised.

149. Additionally Llangiwg and Alltwn Primary schools are on confined and restricted sites and have significant repair and maintenance costs.

150. There is insufficient space at Llangiwg Primary school site to accommodate all the pupils from Alltwn and Godre'rgraig primaries.

151. Llangiwg Primary is located over two sites and neither site would be able to accommodate the necessary additional buildings and external areas that a larger school would require.

152. There is insufficient space at Alltwn Primary School to accommodate all the pupils from Llangiwg and Godre'rgraig Primary schools.

153. Godre'rgraig Primary has been relocated from its original site due to the risk of landslide and so would not be a suitable choice for accommodating pupils from any of the schools. It would also not be feasible to consider accommodating extra pupils from Llangiwg and Alltwn in Godre'rgraig Primary School's temporary building.

154. There is no direct capital cost associated with this option.

155. This option does not provide the opportunity for a new, purpose built LSC. It is unlikely that any of the three schools currently could accommodate the extra provision in the space available.

156. It is also the case that if the pool remains in its present position the opportunity to create a complementary facility alongside the leisure centre would be lost. Without the pool the vision of a community learning and wellbeing campus would also not be realised.

157. This option is not recommended as a basis for consultation.

Option 4 – Close one of the three schools and transfer pupils to the remaining two schools, maintain the pool in its current position, do not establish a new ASD provision.

158. This option would prevent pupils and staff from benefitting from a new, purpose built school, meaning that recognised advantages from a modern learning environment would not be realised.

159. Additionally Llangiwg and Alltwen Primary schools are on confined and restricted sites and have significant repair and maintenance costs.

160. Godre'rgraig Primary has been relocated from its original site due to the risk of landslide and so would not be a suitable choice for accommodating pupils from any of the schools. It would also not be feasible to consider accommodating extra pupils from Llangiwg or Alltwen in Godre'rgraig Primary School's temporary building.

161. There is insufficient space at Llangiwg Primary school site to accommodate all the pupils from Godre'rgraig Primary. PLASC 2020 data indicates that combining Llangiwg Primary and Godre'rgraig Primary pupils on the site of Llangiwg Primary would require 254 pupil places (R-Yr6) which would be 107 pupils over capacity.

162. There is insufficient space at Alltwen Primary School to accommodate all the pupils from Godre'rgraig Primary School. PLASC 2020 data indicates that combining Alltwen and Godre'rgraig Primaries on the site of the current Alltwen Primary would require 335 pupil places (R-Yr6) which is 97 pupils over capacity.

163. Currently the majority of pupils attending Godre'rgraig Primary School are from its catchment area. It could be possible to close

Godre'rgrraig Primary and split the current catchment area so that pupils could be allocated to either Llangiwg Primary or Alltwen Primary but this could be potentially divisive for the pupils and the Godre'rgrraig community as a whole.

164. There is no direct capital cost associated with this option.

165. This option does not provide the opportunity for a new, purpose built LSC. It is unlikely that any of the three schools currently could accommodate the extra provision in the space available.

166. It is also the case that if the pool remains in its present position the opportunity to create a complementary facility alongside the leisure centre would be lost. Without the pool the vision of a community learning and wellbeing campus would also not be realised.

167. This option is not recommended as a basis for consultation.

Option 5 – Close Alltwen, Godre'rgrraig and Llangiwg Primary schools and build a new replacement primary school on one of the existing school sites, maintain the pool in its current position, do not establish a new ASD provision

168. There is a significant capital investment cost associated with this proposal for which Welsh Government grant funding would be needed.

169. All three schools are on confined and restricted sites which would not allow the benefits of a new school build and facilities to be fully realised, including access to grant funding.

170. Additionally the potential cost of temporary accommodation to house pupils during the construction phase would incur further costs.

171. Additionally Godre'rgrraig Primary school site is deemed unsafe due to the risk of landslide which would further rule out the possibility of building on this site.

172. This option does not provide the opportunity for a new, purpose built LSC. As the three schools currently are on restricted or temporary sites there it would not be desirable to increase the footprint of the school in order for it to accommodate the extra provision.

173. It is also the case that if the pool remains in its present position the opportunity to create a complementary facility alongside the leisure centre would be lost. Without the pool the vision of a community learning and wellbeing campus would also not be realised.

174. This option is not recommended as a basis for consultation.

Option 6 - Close Alltwen, Llangiwig and Godre'rgraig Primary schools and build a new school in Parc Ynysderw to accommodate 630 pupils (plus 140 nursery pupils) from the catchment areas of Alltwen, Llangiwig and Godre'rgraig establish a new ASD provision and build a new pool.

175. Whilst there is a significant cost to building a new primary school, the existing schools on their current sites are hindered through lack of space for implementing improvements. Land is available at Parc Ynysderw which will enable the new school to have access to large outdoor play areas and improved physical activity and wellbeing opportunities, and will offer far more space to accommodate a greater number of pupils in a purpose built school appropriate to the requirements of the modern curriculum.

176. The new 21st century school will accommodate 630 full-time pupils and 140 part-time (70 a.m. /70 p.m.) nursery age pupils and will create significant teaching and learning benefits for pupils, staff and the community. New builds have been shown to have a positive impact on standards and pupil wellbeing, and can improve many aspects of curriculum delivery. Combining the three schools can deliver more effective curriculum provision and greater teaching and learning opportunities.

177. Increasing pupil numbers at a single site school by combining the three schools in a brand new purpose built facility would provide a far more effective, long-term use of public money, addressing surplus places and providing a purpose built 'state of the art' 21st century teaching and learning environment which will improve pupil outcomes.

178. The new build will be funded jointly from Welsh Government 21st century School Programme capital grant monies and from the Council's prudential borrowing capacity.

179. The new build will also remove existing maintenance and repair liabilities at the three current sites.
180. Including an LSC provision in the new build will ensure that pupils are provided with purpose built, 21st century standard facilities, with the aim of ensuring best possible outcomes for pupils, and will address identified need for further provision for pupils with ASD, specifically primary aged pupils.
181. The pool will provide an additional facility alongside the leisure centre, revitalising and increasing the health and well-being facilities in the area. The pool is currently used by some schools in the area but this scheme aims to increase usage by schools and by the wider community due to its improved location.
182. This option is recommended by officers.

Option 7 - Close Alltwen, Llangiwg and Godre'rgraig Primary schools and build a new school on another site to accommodate 630 pupils (plus 140 nursery pupils) from the catchment areas of Alltwen, Llangiwg and Godre'rgraig Primaries, establish a new ASD provision and maintain the pool in its current location

183. The benefits of a 21st Century school teaching and learning environment would be realised and significant backlog maintenance and repair liabilities would be removed.
184. However identifying a second site which would be large enough to accommodate all the requirements of a 21st century school in an area within reasonable travelling distance for all pupils is very difficult as there is very little suitable land available.
185. Additionally the benefit of being in Parc Ynysderw with the improved leisure offer and close proximity to Cwmtawe Community School would not be realised if the school was built elsewhere.
186. If a large enough site could be identified then it would be possible to include an LSC for primary aged pupils with a statement of ASD. Including this provision in the new build will ensure that pupils are provided with purpose built, 21st century standard facilities, with the aim of ensuring best possible outcomes for pupils, and will address identified need for further provision for pupils with ASD, specifically primary aged pupils.

187. If the pool was not to be located at Parc Ynysderw then the opportunity to create a complementary facility alongside the leisure centre would be lost. The vision of a community learning and wellbeing campus would also not be realised if the Parc Ynysderw site is not utilised.

188. This option is not recommended as a basis for consultation

Option 8 - Build 3 new, replacement primary schools on the existing sites of Alltwen, Llangiwig and Godre'rgraig Primary schools, maintain the pool in its current position, and establish a new ASD provision on one of the sites

189. All three schools are on confined and restricted sites which would not allow the benefits of a new school build and facilities to be fully realised, and could increase costs significantly. Building three schools rather than one would not be cost effective and access to grant funding is unlikely to be successful. There are potentially significant additional costs associated with the need to provide temporary accommodation to decant pupils whilst the construction phase progresses.

190. Additionally a new site would need to be identified for Godre'rgraig Primary, and suitable land of the appropriate size is not available within the catchment area.

191. This option does provide the opportunity for a new, purpose built LSC on one of the sites, should a space large enough be found in the area. However including this provision would further increase the costs of the option.

192. It is also the case that if the pool remains in its present position the opportunity to create a complementary facility alongside the leisure centre would be lost. Without the pool the vision of a community learning and wellbeing campus would also not be realised.

193. This option is not recommended as a basis for consultation.

Preferred Option – Option 6

194. Having considered all the information gathered to date, it is the view of officers that closing Alltwen, Llangiwig and Godre'rgraig Primary

schools and establishing a new community school for 630 pupils and 140 nursery pupils in a 21st century new build will deliver the greatest benefits to pupils, staff and the wider community as a whole.

195. The inclusion of an LSC for primary aged pupils with ASD gives an opportunity to provide pupils with a purpose built facility with the aim of ensuring best possible outcomes for pupils,

196. Additionally establishing the school on the identified site of Parc Ynysderw and creating enhanced learning, health and wellbeing facilities to include the leisure centre, new swimming pool and Cwmtawe Community Comprehensive, will provide opportunities to develop and improve primary education in the area.

Impact on pupils and parents

197. The new primary school will serve the combined catchment areas of Alltwen, Godre'rgraig and Llangiwig Primary schools. The proposed new school will provide a stimulating teaching and learning environment in state of the art, 21st Century facilities that will impact positively on the self-esteem and well-being of pupils and will aim to improve the learning outcomes for all children across the ability range, including those pupils attending the LSC.

198. The new school will have sufficient playing fields and green space available on site which is not the case with the existing schools and which can be made available for community use.

199. The arrangements for admission to the new primary school will allow full-time pupils on roll at Alltwen, Godre'rgraig and Llangiwig Primary schools at the point of closure to transfer to the roll of the new school, subject to the wishes of parents or unless pupils are transferring to secondary education. Prospective pupils (including nursery pupils transferring to full-time education) will need to apply for a place at the primary school, in line with the Council's school admissions policy.

200. Class sizes at the new primary school will be set by the head teacher and governing body. When setting the class sizes the relevant Welsh Government legislation and guidelines will be followed, including the recommendation that classes are no larger than 30 pupils.

201. Admission to the proposed LSC would be via a special admission panel of the Council and specific entry and exit criteria would apply.

Impact on travel arrangements

202. For many of the primary aged pupils the possible location of the proposed new school on the site at Ynysderw remains within 2 miles travel distance for homes in the catchment area. Home to school journey times from within the catchment area fall within reasonable limits for primary age pupils. Prior to the new school opening suitable walking routes will be assessed.

203. Support with home to school travel will be made available in line with the Council's Home to School Transport policy. This means that primary school aged pupils living 2 miles or more from their nearest suitable or designated school will be considered for transport assistance.

204. Under the School Travel Plan requirements, all schools, together with the Council's Road Safety Team, are committed to:

- improving road safety within the local community
- raising awareness about travel issues
- encouraging walking, cycling and public transport for the school journey where applicable
- encouraging independent travel where applicable

Impact on governors

205. A temporary governing body will be established prior to the opening of the new school. The temporary governing body will take important decisions about the new school including the appointment of a head teacher, agreeing a staffing structure and adopting operating procedures and agreeing a name for the school. The temporary governing body will also resolve other issues including school uniform which, in line with good practice, will be determined following consultation with pupils and parents.

206. The temporary governing body is likely to be made up of existing governors from Alltwn, Godre'rgraig and Llangiwg Primary schools as this ensures continuity and will place the new school on a sound footing.

207. Each school will continue to exist, managed by their respective governing bodies, until all three schools are closed on 31st August 2024. During this period the existing and temporary governing bodies will undertake their duties in parallel.

208. When the new school is opened, it will be managed by the temporary governing body until a permanent governing body is established. The governing bodies of Alltwen Primary, Godre'rgraig Primary and Llangiwig Primary will cease to exist once the new school is opened.

Impact on special needs education provision

209. There are no specialist units for children with statements of special educational needs at either of the three schools, i.e. provision recognised by the Council as reserved for pupils with SEN. Pupils with additional learning needs, including children with statements of special educational needs, are supported in a mainstream setting with appropriate funding for this purpose. The new school will continue to offer this level of support.

210. Data analysis suggests that a number of pupils within the Swansea Valley travel to gain additional learning support in specialist units elsewhere within Neath Port Talbot. The data also shows increasing demand for specialist support at primary age for pupils in NPT with Autistic Spectrum Disorder.

211. Pupils attending the proposed LSC provision within the new school will benefit from being taught by specialist staff, experienced in working with pupils with ASD needs. There is also the possibility that mainstream pupils with ASD could also benefit from the expertise available as the specialist knowledge and skills-set of the staff employed to work at the proposed LSC will be available to share with mainstream staff and, as such, will indirectly benefit SEN provision at the new school.

212. It is also envisaged that the LSC provision will be able to provide support and training for other mainstream primary schools across Neath Port Talbot, building skills, competencies, expertise and capacity of all staff working with children with ASD.

Financial impact

213. The cost of the new build is estimated at c.£22,705,000 apportioned as per table 6 below.

Table 7

Project	NPT Investment	WG Investment	Total Investment
Ysgol Newydd Swansea Valley	7,946,750	14,758,250	22,705,000

214. Welsh Government 21st Century Schools Programme capital grant funding has been approved, in principle. The full business case will be with the Welsh Government for decision in due course.

215. Combined backlog maintenance and accessibility costs for the existing schools amounts to circa. £2m which would be removed by this proposal along with the ongoing need to fund the associated costs of Godre'rgraig Primary School's current off-site hired/leased accommodation. Additionally backlog maintenance costs for the current pool amounting to £1,221,783 would also be removed by this proposal.

216. Revenue funding for schools is distributed on an annual basis by means of an approved formula. This ensures school budget shares are allocated on a simple, objective and measurable basis.

217. Most of the revenue budget allocation to Alltwen, Godre'rgraig and Llangiwg Primary schools is generated by pupil numbers. Similarly, the new primary school's budget will be based mainly on the combined pupil roll. Savings will occur as the new school will have one head teacher and one management structure. Revenue savings will be re-invested in the education budget. In this regard, the proposal supports the Council's effective management of its education budget and promotes the more equitable distribution of funding across local schools.

218. The proposed new school will receive additional funding to manage the LSC provision for up to 16 pupils. Meeting the special needs education of pupils in local settings, i.e. within the County Borough, avoids having to secure expensive out-of-county provision. The cost of providing education outside the County Borough for pupils with specialist needs is high, and can amount to circa. £80k per pupil per

year. This annually presents a significant demand on the Council's education budget.

219. Additional recurring revenue costs associated with this proposal such as potential additional transport costs may be incurred. Similarly there will be revenue efficiency savings associated with this proposal.
220. Based on the funding delegated to schools in the 2020/2021 financial year, per pupil funding for Alltwen Primary school is £3,685 whilst for Llangiwig Primary school per pupil funding is £3,965 and for Godre'rgraig Primary school £ 3,886. This compares with the average for NPT primary schools at £3,941.
221. Prior to the new primary school opening on 1st September 2024 Alltwen, Godre'rgraig and Llangiwig primary schools will receive their annual school budget shares for the 5/12^{ths} of the financial year 2023/2024. When the new school opens on 1st September 2024 it will receive a budget share based on the number of pupils on roll at that time.

Integrated Impact Assessment

222. A first stage Integrated Impact Assessment (IIA) has been undertaken to assist the Council in discharging its legislative duties (under the Equality Act 2010, the Welsh Language Standards (No.1) Regulations 2015, and the Well-being of Future Generations (Wales) Act 2015 the Environment (Wales) Act 2016).
223. The first stage screening assessment is attached as appendix A. This indicates that the proposal is likely to have an impact on pupils, staff and other potential users of the new school. The proposal may also impact on opportunities to use the Welsh language.
224. Members should note that work on the IIA is an ongoing process and following full consultation where views of all stakeholders will be gathered, greater information will be available which will further help to inform the full assessment.
225. A fully completed IIA will be put before Members prior to any final decision being taken on whether or not the proposal is to be implemented. The impact on different protected groups, together with the three equality needs to which Members must have regard will be set out in the IIA.

226. As part of the IIA the impact on the proposal on people's opportunities to use the Welsh language and on treating the Welsh language no less favourably than English will also be fully assessed.

227. Members are reminded that in response to the Well-being of Future Generations (Wales) Act 2015 the Council has set three strategic objectives which contribute to the seven national well-being goals that the Welsh Government requires all public bodies in Wales to contribute to, in order to achieve 'the Wales we want'.

228. The Council's well-being objectives and the supporting improvement priorities are set out in the Council's Corporate Plan. This proposal directly supports wellbeing objective 1 – 'to improve the wellbeing of children and young people' through the provision of a 21st century school for current and future generations of primary aged pupils.

229. Through creating facilities that can be used by the community the proposal also supports wellbeing objective 2 – 'to improve the wellbeing of all adults who live in the county borough' and wellbeing objective 3 'to develop the local economy and environment so that the wellbeing of people can be improved', through the creation of sustainable jobs.

Welsh in Education Strategic Plan

230. The Council recognises that language and culture are essential parts of an individual's identity and is committed to promoting and celebrating the Welsh language and culture in a pro-active and inclusive way. The Council's Welsh in Education Strategic Plan (WESP) details how it intends to support and further develop Welsh language education in schools.

231. WESP objective 'To ensure that second language provision across all schools provides pupils with the skills and ability to become confident and sustained speakers of Welsh and that the provision develops a meaningful relationship between the language and the learner' is of particular relevance to this proposal.

232. Alltwen, Godre'rgraig and Llangiwig primaries teach Welsh as a second language and this will also be the case for the new school. Currently 25% of staff across the three schools are fluent or fairly fluent Welsh speakers. By combining the three schools Welsh language provision could be improved as there could be greater

impact on having a more concentrated group of Welsh speakers able to support pupil and staff language development skills through the medium of Welsh.

233. The Swansea Valley area is a linguistically significant area as it contains the highest number and percentages of Welsh speakers in Neath Port Talbot, and is amongst the highest in Wales as a whole.
234. Primary education through the medium of Welsh is available at Ysgol Gynradd Gymraeg Pontardawe and Ysgol Gynradd Gymraeg Trebannws. Additionally Ysgol Gymraeg Ystalyfera –Bro Dur, which is approximately 5 miles from the proposed site, provides all through 3-19 education through the medium of Welsh.
235. Significant investment has taken place at Ysgol Gymraeg Ystalyfera –Bro Dur through projects in both Band A (circ. £17.5m) and Band B (circ. £9m) of 21st Century Schools Capital Funding Programme.
236. In addition funding of £1.6m has been secured to improve provision at Ysgol Gynradd Gymraeg Pontardawe, including extended and enhanced childcare and Foundation Phase facilities. Work is expected to be completed in 2021.
237. It is not expected that this proposal would reduce Welsh language provision in the area, however further exploration of possible impacts on the Welsh language will be undertaken during consultation.

Workforce impacts

School staff

238. There are potential teaching and learning benefits for staff working at a large primary school, including greater opportunity for staff development and career progression through a broader range of experiences.
239. The proposal will mean changes that impact on the employment of school staff as the existing schools will close on 31st August 2024. Upon closure all staff will cease to be employed at their respective schools. The new school will set a new staffing structure appropriate to its needs and budget.
240. A temporary governing body will be established before the opening of the primary school. The temporary governing body will have the

responsibility of appointing a head teacher. Specifically in relation to the posts of head teacher and deputy head teacher, the Council's policy is for these to be advertised nationally. Once the head teacher has been appointed that person will, together with the temporary governing body, be responsible for determining the staffing structure for the new primary school.

241. The new primary school will open on 1st September 2024 and school staff will be employed by the new governing body for the primary school (albeit appointed by the temporary governing body).

Centrally employed staff

242. Although this proposal rationalises provision across the three schools, there will be employment opportunities at the new school for centrally employed catering and cleaning staff.

Staff support

243. As part of the process all school based staff will be supported by the relevant school policies and procedures which will include full consultation. Previous experience has shown that some staff wish to secure employment in the new school but others take the opportunity to take on new challenges elsewhere. Employees identified at risk of redundancy will be given access to the Council's prior consideration register. The Council is committed to supporting staff at risk of compulsory redundancy and has secured the support and goodwill of the teacher associations/trade unions and governing bodies across the Council, via an employers' pledge. The Council has a good track record for supporting staff in such situations.

Legal impacts

244. Members are referred to Appendix C which sets out in detail the relevant legislation and legal implications relating to a decision on this proposal.

245. The proposal requires the establishment and discontinuation of schools. The School Standards & Organisation (Wales) Act 2013 (the Act) provides the legislative framework by which the Council may implement the proposal. The Welsh Government's School Organisation Code, November 2018, made under Sections 38 and 39 of the Act, imposes on the Council requirements and guidelines on matters relating to school organisation, including consultation.

246. Pupil travel arrangements will be in line with the requirements of the Learner Travel (Wales) Measure 2008; the Learner Travel Statutory Provision and Operational Guidance 2014; and the Council's Home to School Travel Policy.
247. Revenue funding will be in line with the requirements of the School Standards and Framework Act 1998; the School Funding (Wales) Regulations 2010; and the Council's approved formula for funding schools.
248. The management of staff affected by the proposal will follow the relevant school policy and procedure requirements.
249. The legislation referred to above is available using the electronic links in the section on background papers, below.

Risk management

250. A risk assessment has been carried out under the Council's Risk Management Policy 2018.
251. The potential risks associated with the proposal comprise the Council's reputation, educational standards, financial management, staff employment and service delivery.
252. Potential risk areas in implementing the proposal include:
- resistance to change leading to lack of pupil, parent and staff support
 - educational standards not maintained
 - less effective support for pupil well-being in a larger school and in a different location
 - increased home to school travel time for some pupils
 - staff anxiety about job security and new management arrangements
 - loss of school identity from closure of existing establishments
 - forecasted pupil numbers do not materialise
 - budget allocation insufficient to meet needs
 - 21st Century School capital funding opportunity not realised
 - Welsh language not developed further
 - discrimination against protected characteristics
 - loss of community facilities
 - increased governance and staff responsibilities
253. Failing to implement the proposal will result in the following

teaching/learning and financial benefits not being fully realised, particularly in relation to:

- providing a stimulating and innovative teaching and learning environment that will impact positively on the self-esteem and well-being of all pupils and staff
- pupils accessing a wider range of staff expertise
- opportunities for wider peer group interaction
- staff having greater opportunity for curriculum development and career opportunities through broader experience and enhanced continuing professional development options
- a more efficient and effective use of resources, and savings from economies of scale
- reducing the number of surplus pupil places and improving the school building environment
- creating a learning and recreational campus promoting community cohesion

254. The benefits of implementing the proposal will mitigate the effects of identified risks. A new school provides greater prospects for improving educational attainment for pupils. Estyn (Jan 2007) reported on the performance of schools before and after moving into new buildings, stating that ageing school buildings which are in a poor state of repair cannot meet modern teaching and learning needs. The report also states that inadequate buildings make improvements in standards more challenging and that in nearly all schools with new or refurbished buildings, pupils attainment and achievement have improved and in some cases the improvement has been significant.

255. The full risk assessment is attached to this report as appendix B.

Community usage impact assessment

256. The proposal for the new build school also includes the creation of a learning, health and wellbeing community campus through the addition of a new build pool on the Parc Ynysderw site, with the aim of providing opportunities for all members of the Swansea Valley community to benefit from modern, fit for purpose facilities.

257. The new build school and pool co-location alongside the existing Cwmtawe Community School and Pontardawe Leisure Centre will provide opportunities to further develop and integrate community

provision with delivery partners for indoor and outdoor sporting activities. The pool is currently used by some schools in the area but this scheme aims to increase usage by schools and by the wider community due to its improved location

258. Cwmtawe Community School has a range of facilities that can be used by community groups including hard tennis courts, meeting spaces, specialist facilities and performance spaces. These facilities will continue to be available and can be fully utilised by the community, and the primary school facilities will complement and extend these, providing a wide range of activities, services and experiences for pupils, families and the wider community.
259. Early years and childcare facilities are already available within walking distance of the new school, and it is expected that wrap around care will be easier to facilitate due to the location.
260. Additionally Pontardawe has a rich cultural heritage, and is known for promoting and developing the arts both through the medium of Welsh as well as English. The close proximity of the new learning campus to the heart of Pontardawe town would ensure pupils and families are able to both benefit from and contribute to this heritage.
261. This proposal will help to deliver the Council's aim of improving the health and wellbeing of all people living in Neath Port Talbot and reducing the gap between the least and most healthy.
262. A more detailed community impact assessment will be undertaken during the consultation period and the findings reported following the end of the consultation process.

Fields in Trust

263. The playing fields at Parc Ynysderw are one of 471 King George Fields established as a memorial to King George V.
264. Fields in Trust is the sole trustee of the King George's Fields Foundation and as such its consent is needed for any disposals or changes of use. Fields in Trust works to protect parks, playing fields and other spaces and as part of the planning process supports Sport Wales in its role as the statutory consultee on developments affecting playing fields.

265. Officers have formally engaged with Fields in Trust to seek their views on the proposal before progressing. Fields in Trust has stated that it is responsive to local change and flexible in its dealings with landowners and will be happy to consider a possible exchange of land to accommodate the new school. The proposal will be assessed against the relevant policy set out in Planning Policy Wales and consideration will also be given to the playing field needs of the school as set out in Building Bulletin 99: Building Framework for Primary School projects which is adopted by the Welsh Government's 21st Century Schools Programme.

Consultation

266. This school organisation proposal is being brought forward under the Council's Strategic School Improvement Programme. Formal consultation is required in line with the Welsh Government's School Organisation Code, November 2018, which specifies the procedures to be followed, including the content of the consultation document and those to be consulted.

267. Subject to approval, it is intended to consult on this proposal between 3rd November 2020 and 5th January 2021 - see timeframe below. This allows an extra 3 weeks in addition to the statutory 6 weeks for consultees to consider the proposal and submit a response. Responses to the consultation will be reported to Cabinet for consideration by Members in February 2021.

268. If, following consideration of the responses, Members decide to progress the proposal then a 28 day period will follow for the submission of objections.

Publication of consultation document	3 rd November 2020
Period for submitting responses	3 rd November 2020-5 th January 2021
Consultation report published	5 th February 2021
Proposed implementation date	1 st September 2024

269. When establishing a new school it is necessary to ensure that enough time is set apart to enable decisions to be made in a considered and timely manner, and additionally when building a new school there is a great deal of time needed for planning to ensure the

final build meets the needs and desires of the pupils, staff and community who will be using it. As such it is necessary to start statutory processes at the current time to ensure that there is sufficient time available to complete all necessary processes.

270. Information on the proposal and the consultation document will be available on line on the Council's website and also on the websites of the affected schools. Hard copies will also be available on request.

271. All consultees, as directed by the Code will be sent the Consultation document via email. The Council's social media channels will also contain information on how to access the consultation document.

272. Consultation responses can also be submitted using the Consultation Portal on the Council's web page, or by email to SSIP@npt.gov.uk, or in writing.

273. Due to the ongoing public health situation there will be no face-to-face consultation events arranged for this consultation. Questions concerning the proposal can be submitted to SSIP@npt.gov.uk.

274. It is the intention of officers to meet with pupils during the course of the school day, either remotely or in person depending on the views of the schools and parents, and on the Public Health Wales guidelines in place.

Recommendation

275. Having given due regard to the impact assessments in relation to equality, risk, community usage and Welsh language, and to the Wellbeing of Future Generations Act (Wales 2015), together with the legal implications, it is recommended that, in line with Section 48 of the School Standards and Organisation (Wales) Act 2013, Members approve consultation on the proposal to establish an English-medium 3-11 school with a specialist learning support centre, in new build premises to accommodate pupils from the current catchment areas of Alltwn Primary, Godre'rgraig Primary and Llangiwg primary, all of which will close on 31st August 2024.

276. The proposed date of implementation to be 1st September 2024

Reasons for proposed decision

277. This decision is necessary to comply with the formal consultation requirements imposed on the Council by the School Organisation Code.

278. Subject to the outcome of consultation, implementation of the proposal will enable the Council to promote high educational standards and the fulfilment of every child's potential. It will also enable the Council to meet its duty to secure efficient education in its area.

Implementation of the decision

279. The decision is proposed for implementation after the three day call in.

Appendices

Appendix A: Integrated Impact Assessment First Stage

Appendix B: Risk Assessment

Appendix C: Legal Implications

List of background papers

- a. Cabinet Report: October 2017
<http://moderngov.npt.gov.uk/documents/s32731/CABINET%20report%20041017.pdf>
- b. Strategic School Improvement Programme Principles Paper: September 2008
[https://democracy.npt.gov.uk/Data/Cabinet/20080924/Agenda/\\$CAB-240908-REP-EL-KN.doc.pdf](https://democracy.npt.gov.uk/Data/Cabinet/20080924/Agenda/$CAB-240908-REP-EL-KN.doc.pdf)
- c. Welsh Government - School Organisation Code: November 2018
<https://gov.wales/sites/default/files/publications/2018-10/school-organisation-code-second-edition.pdf>
- d. School Standards & Organisation (Wales) Act 2013
http://www.legislation.gov.uk/anaw/2013/1/pdfs/anaw_20130001_en.pdf
- e. Well-being of Future generations (Wales) Act 2015
<https://gov.wales/well-being-future-generations-wales-act-2015-guidance>
- f. Learner Travel (Wales) Measure: 2008 & the Learner Travel Statutory Provision and Operational Guidance: 2014.
http://www.legislation.gov.uk/mwa/2008/2/pdfs/mwa_20080002_en.pdf
<http://gov.wales/docs/det/publications/140616-ltogg-en.pdf>
- g. Home to School Travel Policy: 2017

https://www.npt.gov.uk/media/4231/npt_home_to_school_travel_policy_2017.pdf?v=20170627002146

h. **Corporate Plan 2019-2022**

<https://www.npt.gov.uk/media/11925/2019-20-corporate-plan-eng-3.pdf?v=20190920114145>

i. **Estyn**

<https://www.estyn.gov.wales/inspection/search>

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Impact Assessment - First Stage**1. Details of the initiative**

Initiative description and summary: Strategic School Improvement Programme - Proposal to establish an English- medium 3-11 School to replace Alltwen, Godre'rgraig and Llangiwg Primary Schools
Service Area: Strategic School Improvement Programme
Directorate: ELLLS

2. Does the initiative affect:

	Yes	No
Service users	✓	
Staff	✓	
Wider community	✓	
Internal administrative process only		

3. Does the initiative impact on people because of their:

	Yes	No	None/ Negligible	Don't Know	Impact H/M/L	Reasons for your decision (including evidence)/How might it impact?
Age	✓				H	<p>This directly affects children aged 3-11 who currently attend Alltwen, Godre'rgraig and Llangiwg Primary schools, and children who will attend the new school in the future.</p> <p>Current pupil numbers in the three schools combined are 454 full time and 66 part time. (PLASC 2020)</p> <p>The proposal is also likely to have an impact on children under 3 who access childcare facilities.</p> <p>Primary aged pupils who attend schools in the Pontardawe area may also be indirectly affected by the</p>

					<p>proposal, as well as children who live in the area and attend schools elsewhere.</p> <p>Pupils attending Cwmtawe Community School may also be impacted upon by this proposal.</p> <p>Data indicates that currently 78 members of staff are employed across the three schools. School reorganisation is likely to affect employment opportunities for staff.</p> <p>This aspect will need to be fully explored as part of a full assessment.</p>
Disability	✓			M	<p>The Council's arrangements for education across the county borough include those children and young people with a disability. The proposal is likely to impact upon this protected characteristic group.</p> <p>Currently 27% of pupils who attend either Alltwen, Llangiwg or Godre'rgraig are recorded as having an additional learning need (ALN). Of these 17% have their needs met by the school they attend, 7% receive additional support from other agencies and 2% have a statement of Special Educational Need (SEN).</p> <p>The Council is required to have regard for the needs of disabled learners and learners with learning difficulties when assessing transport needs.</p> <p>Data reveals that less than 1% of staff across the three schools have indicated that they have a disability.</p> <p>Some staff and pupils of the current schools may be affected by the move to a different location, but a new build school will have enhanced facilities which should improve provision for disabled users.</p> <p>This aspect will need to be further explored as part of a full assessment.</p>

Gender Reassignment	✓				L	<p>This is not a criterion considered in terms of the Council's education arrangements either for pupils or school staff.</p> <p>However it is likely that the new build premises will allow for greater opportunities for proactive approaches to equality concerns, including those which relate to gender reassignment.</p> <p>This aspect will need to be further explored as part of a full assessment.</p>
Marriage/Civil Partnership			✓			<p>This is not a criterion that will be impacted upon by this proposal</p>
Pregnancy/Maternity			✓			<p>This is not a criterion that will be impacted upon by this proposal</p>
Race				✓	L	<p>All Neath Port Talbot schools are inclusive for pupils of all ethnic groups and ethnicity is not a criterion under the Council's Admissions Policy.</p> <p>The majority of pupils in Alltwen, Godre'rgraig and Llangiwig primary Schools are white British, however 6% of pupils identify with other ethnic groups. It is possible that these pupils may be disproportionately affected by the proposal.</p> <p>Race is not a criterion that is considered when employing staff currently or for the proposed new school.</p> <p>98% of staff employed at the present time at the three schools identify as white British, with the remainder preferring not to indicate ethnic origin.</p> <p>This aspect is unlikely to be impacted upon as a result of the proposal, however it will be further explored as part of a full assessment.</p>
Religion/Belief			✓		L	<p>Alltwen, Godre'rgraig and Llangiwig primary schools are non-faith schools and admit pupils of all religions/beliefs who wish to attend. Religion or belief is not a criterion</p>

						<p>under the Council's Admissions Policy which is applicable to all three schools. Admission to the new school would be in line with this policy.</p> <p>Religion/belief is not a criterion that is considered when staff are employed currently or for the proposed new school.</p> <p>It is unlikely that the proposal could impact on pupils and staff disproportionately due to their religion or belief, however this will be explored in more detail as part of the full assessment.</p>
Sex		✓			M	<p>All schools admit boys and girls currently and the new school will also admit both sexes. Currently across the three schools there are 245 female pupils and 275 male pupils.</p> <p>Girls and boys may be affected differently by school reorganisation. It may be the case that either sex could be disproportionately affected by the proposal.</p> <p>Male and female staff are employed at all three schools and it is expected that the new school will have a similar balance of male and female employees. Current data indicates that 88% of staff employed at the schools are female. This may mean that female staff would be disproportionately affected by school reorganisation in relation to employment opportunities. This aspect will need to be further explored as part of a full assessment.</p>
Sexual orientation			✓			<p>This is not a criterion that will be impacted upon by this proposal.</p>

4. Does the initiative impact on:

	Yes	No	None/ Negligible	Don't know	Impact H/M/L	Reasons for your decision (including evidence used) / How might it impact?
People's opportunities to use the Welsh language	✓				M	<p>The Swansea Valley area is a linguistically significant area as it contains the highest number and percentages of Welsh speakers in NPT, and is amongst the highest in Wales as a whole. There are concerns however that the number of Welsh speakers is declining and work has been ongoing to ensure the language is promoted and grows.</p> <p>Alltwen, Godre'rgraig and Llangiwg primaries teach Welsh as a second language and this will also be the case for the new school. Currently 25% of staff across the three schools are fluent or fairly fluent Welsh speakers. By combining the three schools Welsh language provision could be improved as there could be greater impact on having a more concentrated group of Welsh speakers able to support pupil and staff language development skills through the medium of Welsh. This aspect will need to be explored in more detail as part of the full assessment to better understand possible impacts.</p>
Treating the Welsh language no less favourably than English	✓				L	<p>A new build EM school could attract pupils currently attending WM schools, which could hinder development of Welsh as a first language in the area, and as such could be seen to be treating the Welsh language less favourably than English.</p> <p>Significant work is being undertaken in a number of the WM schools in the area which will improve provision for teaching and learning and provide extra pupil places, which should mitigate against the impact of a new school.</p> <p>Further exploration of this aspect will be needed as part of the full assessment.</p>

5. Does the initiative impact on biodiversity:

	Yes	No	None/ Negligible	Don't know	Impact H/M/L	Reasons for your decision (including evidence) / How might it impact?
To maintain and enhance biodiversity	x				M	The proposal seeks to build a new primary school in the Parc Ynysderw area of Pontardawe. This is likely to have an impact on the environment, due to the initial build process and the later use of the school and community facilities when operational. These aspects will be explored further as part of the full assessment if the proposal is approved and developed.
To promote the resilience of ecosystems, i.e. supporting protection of the wider environment, such as air quality, flood alleviation, etc.	x				M	

6. Does the initiative embrace the sustainable development principle (5 ways of working):

	Yes	No	Details
Long term - how the initiative supports the long term well-being of people	✓		The proposal if implemented is expected to positively impact on pupils aged 3-11 who will attend the future school, and on older children and adult users including parents, staff, Governors and members of the local community. The enhanced education and leisure facilities will improve wellbeing, not just when the school opens but also into the future, and will provide a valuable resource for the local community.
Integration - how the initiative impacts upon our wellbeing objectives	✓		The Strategic School Improvement Programme and its related projects are included in the Directorate's plans which link to the Council's wellbeing objectives. The proposal directly supports wellbeing objective 1 – 'to improve the wellbeing of children and young people' through the provision of a 21 st century school for current and future generations of primary aged pupils.

			Through creating facilities that can be used by the community the proposal also supports wellbeing objective 2 –‘to improve the wellbeing of all adults who live in the county borough’ and wellbeing objective 3 ‘to develop the local economy and environment so that the wellbeing of people can be improved’, through the creation of jobs during the construction phase and beyond.
Involvement - how people have been involved in developing the initiative	✓		Informal consultation has taken place with schools, Governors, and local members of the Swansea Valley which has helped to shape original idea. The proposal is subject to a full consultation which will involve pupils, staff, Governing Bodies, and the community, as well as others who have an interest in education.
Collaboration - how we have worked with other services/organisations to find shared sustainable solutions	✓		Full consultation is required for this proposal where views from all stakeholders including other services and organisations will be gathered. Following consultation a report will be taken to Cabinet for further consideration. This will further inform the full assessment.
Prevention - how the initiative will prevent problems occurring or getting worse	✓		If implemented the proposal will provide new 21 st century teaching and learning facilities for 770 primary aged pupils. A new school provides greater prospects for improving educational attainment for pupils and should have a positive impact on other services within the Council and community. Additionally the proposal will remove circa. £2m maintenance and accessibility costs for the existing schools.

7. Declaration - based on above assessment (tick as appropriate):

A full impact assessment (second stage) is not required	
Reasons for this conclusion	

A full impact assessment (second stage) is required	✓
Reasons for this conclusion	
<p>Should the proposal proceed it is likely to have an impact on pupils, staff and other potential users of the new school. The proposal may also impact on opportunities to use the Welsh language. A more in depth analysis of the impacts on protected groups and on Welsh Language users is therefore needed. It is also necessary to undertake a full analysis on possible impacts on biodiversity as these impacts are as yet unknown.</p> <p>Following full consultation where views of all stakeholders will be gathered, greater information will be available which will further help to inform the full assessment.</p>	

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	Name	Position	Signature	Date
Completed by	R.Crowhurst	Programme Manager		10.10.20
Signed off by	A .Thomas	Head of Service/Director		10.10.20

Risk Assessment

STRATEGIC SCHOOL IMPROVEMENT PROGRAMME - PROPOSAL TO ESTABLISH AN ENGLISH- MEDIUM 3-11 SCHOOL TO REPLACE ALLTWEN, GODRE'RGRAIG AND LLANGIWG PRIMARY SCHOOLS

Context

1. This risk assessment has been carried out in line with the Council's Risk Management Policy 2018.
2. Implementing the proposal will result in the establishment of a new build primary school to replace Alltwen, Llangiwg and Godre'rgraig primary schools, which will close. The new school will serve the combined catchment area of the three existing primary schools.

The reasons for the proposal

3. The Council is responsible for promoting high educational standards and for delivering efficient primary and secondary education. This will involve reviewing the number and type of schools the Council has in its area and assessing whether or not best use is being made of resources and facilities in order to ensure future provision is sustainable.
4. it is proposed to establish an English-medium 3-11 school with a specialist learning support centre, in new build premises to accommodate pupils from the current catchment areas of Alltwen Primary, Godre'rgraig Primary and Llangiwg primary, all of which will close on 31st August 2024.
5. It is proposed that the new school will be built on land in Council ownership at Parc Ynysderw, Pontardawe and that it will form part of learning, health and wellbeing community campus made up of Cwmtawe Community School and Pontardawe Leisure Centre. The campus will be further enhanced by the addition of a new build 25 metre, 6 lane swimming pool with additional learner pool on the site, to complement the current health and wellbeing offer for pupils and the wider community.

6. The new English-medium community primary school for boys and girls aged 3-11 years will accommodate 630 full-time pupils and 140 part-time (70 a.m./70 p.m.) nursery age pupils. It will be managed with one head teacher and one governing body and will have one budget allocation and one group of staff.
7. The new school will serve the combined catchment areas of Alltwen, Llangiwig and Godre'rgraig primary schools. Pupils from the three existing schools will automatically transfer to the new school subject to parental preference.
8. The new school will provide primary education for children aged 3-11 in a new build 21st century facility which will provide a stimulating teaching and learning environment in state of the art facilities .
9. Additionally the new school will provide support for pupils through the establishment of an LSC for 16 pupils with a statement of ASD. It will also provide the opportunity to become a community hub for the area, building on the work already being undertaken by other well established primary school LSCs.
10. The new build will be funded jointly from Welsh Government 21st century School Programme capital grant monies and from the Council's prudential borrowing capacity.
11. The scheme will also include a new build 25 metre 6 lane swimming pool with additional learner pool, to further enhance the physical activity and wellbeing opportunities for pupils who currently attend Alltwen, Godre'rgraig and Llangiwig primary schools and Cwmtawe Community School, as well as pupils attending nearby YGG Trebannws and YGG Pontardawe.
12. Furthermore the facilities will provide sustainable opportunities for swimming curriculum development for potentially 2500 pupils aged 3-16 in the nearby communities. The swimming pool will complement the current school and community facilities on site to deliver a 21st century health and wellbeing offer for pupils aged 0-16 and for wider community use, making it a sustainable delivery model.

13. The combined new build School, specialist ASD provision and pool will form part of a learning, health and wellbeing community campus at the Parc Ynysderw site, complementing the existing Cwmtawe Community School and Pontardawe Leisure Centre provision. In locating the new build facilities close to Cwmtawe Community School the development will enable pupils and staff from both schools to benefit from increased partnership working, made easier due to their close proximity.

Risks associated with the proposal

14. The potential risks associated with the proposal comprise the Council's reputation, educational standards, financial management, staff employment and service delivery.
15. Potential risk areas in implementing the proposal include:
 - resistance to change leading to lack of pupil, parent and staff support
 - educational standards not maintained
 - less effective support for pupil well-being in a larger school and in a different location
 - increased home to school travel time for some pupils
 - staff anxiety about job security and new management arrangements
 - loss of school identity from closure of existing establishments
 - forecasted pupil numbers do not materialise
 - 21st Century School capital funding opportunity not realised
 - Welsh language not developed further
 - discrimination against protected characteristics
 - loss of community facilities
 - increased governance and staff responsibilities
 - budget allocation insufficient to meet needs
16. Failing to implement the proposal will result in the following teaching/learning and financial benefits not being fully realised, particularly in relation to:
 - providing a stimulating and innovative teaching and

learning environment that will impact positively on the self-esteem and well-being of all pupils and staff

- pupils accessing a wider range of staff expertise
- opportunities for wider peer group interaction
- staff having greater opportunity for curriculum development and career opportunities through broader experience and enhanced continuing professional development options
- a more efficient and effective use of resources, and savings from economies of scale
- reducing the number of surplus pupil places and improving the school building environment
- creating a learning and recreational campus promoting community cohesion

Risk assessment

17. The benefits of reorganisation, as set out above, will mitigate the effects of identified risks. A new school provides greater prospects for improving educational attainment for pupils. Estyn (Jan 2007) reported on the performance of schools before and after moving into new buildings, stating that ageing school buildings which are in a poor state of repair cannot meet modern teaching and learning needs. The report also states that inadequate buildings make improvements in standards more challenging and that in nearly all schools with new or refurbished buildings, pupils attainment and achievement have improved and in some cases the improvement has been significant.
18. The proposal will be subject to a full consultation and will enable the school communities to voice concerns and raise queries. This will support the process of change and aim to reduce anxiety.
19. To address staff anxiety about their employment situation, a temporary governing body will be established and a head teacher appointed before the opening of the primary school. The head teacher together with the temporary governing body will determine the staffing structure for the new primary school.

20. As part of the process all school based staff will be supported by the relevant school policies and procedures which will include full consultation. Previous experience has shown that some staff wish to secure employment in the new school but others take the opportunity to take on new challenges elsewhere. Employees identified at risk of redundancy will be given access to the Council's prior consideration register. The Council is committed to supporting staff at risk of compulsory redundancy and has secured the support and goodwill of the teacher associations/trade unions and governing bodies across the Council, via an employers' pledge. The Council has a good track record for supporting staff in such situations.
21. The appointment of the head teacher and the temporary governing body together with consultation with stakeholders will provide forums that will allow concerns to be considered particularly in relation to the areas of school identity resistance to change. The temporary governing body will have members with an interest in the areas served by the three existing schools and who will be well placed, therefore, to ensure concerns are addressed and the new school becomes the school of choice of pupils and parents.
22. With effective leadership and pastoral support structures, pupil well-being can be effectively supported in large schools.
23. An Integrated Impact Assessment will be required to fully progress this proposal and will be undertaken as part of the consultation process.
24. A Community Impact Assessment will also be required and will be undertaken as part of the consultation process.

Risk register

No	Risk description	L'hood score	Impact score	Overall Risk (Lxl)	Prox'ty *	Planned action to mitigate	Target Date	Owner	Update	Trend Up Down
1	Educational standards not maintained	1	5	Low Risk	4	Implementation of proposal together with appropriate support and challenge	Sept 2024	- SSIP team - EDS - GB - Headteacher - Inclusion support team		
2	Less effective support for pupil well-being in a larger school and in a different location	1	4	Low Risk	4	Implementation of proposal together with the appointment of suitable headteacher and appropriate support and challenge	Sept 2024	- ELLLS - Temp GB - Headteacher - Inclusion support team		
3	Staff anxiety about job security and new management arrangements	4	3	High Risk	1	Implementation of proposal together with consultation with staff and teacher associations/trade unions Ongoing support from HR and clear staff plans agreed with teacher associations/trade unions. Appointment of temp governing body and head teacher.	Autumn term 2020 ongoing	- SSIP team - HR	.	

4	Loss of school identity from closure of existing establishments	4	2	Medium Risk	1	Implementation of proposal together with support for school community	Sept 2024	<ul style="list-style-type: none"> - Temp GB - Headteacher - EDS - SSIP 		
5	Resistance to change leading to lack of pupil, parent and staff support	2	2	Low Risk	2	Information on the proposal to provide greater awareness. Effective communication with parents and staff	Autumn term 2020- Spring term 2021	<ul style="list-style-type: none"> - SSIP team 		
6	Forecasted pupil numbers do not materialise	1	4	Low Risk	3	Implementation of proposal together with consultation meetings and appointment of suitable headteacher,	Ongoing: 2022 - 2024	<ul style="list-style-type: none"> - SSIP team - Temp GB - Headteacher 		
7	21 st Century School capital funding opportunity not realised	1	5	Low Risk	2	Business case approval and implementation of proposal	Sept 2020- Jan2021	<ul style="list-style-type: none"> - ELLLS - Environment Services - SSIP team 		
8	Discrimination against protected characteristics	2	4	Medium Risk	4	EIA mitigation. Inclusive ethos and practices. Appointment of suitable headteacher. Appropriate support and challenge	Ongoing 2021 -2024	<ul style="list-style-type: none"> - ELLLS - SSIP team - EDIS - Temp GB - Headteacher - Inclusion support team 		

9	Increased home to school travel time for some pupil leading to poor attendance	2	4	Medium Risk	4	Inclusive ethos and practices. Appointment of suitable headteacher. Appropriate support and challenge Safe travel routes to school supported by school travel plans	Sept 2024 onwards	<ul style="list-style-type: none"> - ELLLS - SSIP team - EDIS - Temp GB - Headteacher - Road Safety Officer 		
10	Loss of community facilities	1	3	Low Risk	4	Community facilities enhanced through proposal	Sept 2024	<ul style="list-style-type: none"> - ELLLS - Environment Services - SSIP team - Temp GB - Headteacher 		
11	Welsh language development not supported	1	3	Low Risk	4	Welsh will be taught in line with curriculum guidelines for an English-medium school. A larger school presents greater opportunity for language diversity and development with potentially more Welsh speakers available on the staff complement	Sept 2024	<ul style="list-style-type: none"> - ELLLS - Temp GB - Headteacher 		

12	Increased governance and staff responsibilities	1	3	Low Risk	4	Although a larger school will mean additional responsibilities, economies of scale and a larger pool of professional skills and expertise will allow responsibilities to be shared more widely. Appointment of temp. GB and suitable head teacher.	Ongoing: 2021 - 2024	- ELLLS - Temp GB - Headteacher		
13	Budget allocation insufficient to meet needs			Low Risk		When the new school opens it will receive a budget appropriate for the size of the school and the number of pupils attending.	September 2024	- ELLLS - Temp GB - Headteacher		

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Legal Implications

Education Act 1996: General Duties

1. Part 1 of the Education Act 1996 (“the 1996 Act”) imposes a number of general duties on all local authorities in Wales. The general duty in section 13 of the 1996 Act is to contribute (so far as the Council’s powers enable them to do so) towards the spiritual, moral, mental and physical development of the community by securing that efficient primary education and secondary education are available to meet the needs of the population of their area.
2. Section 13A(3) of the 1996 Act states that a local authority in Wales must ensure that their relevant education functions and their relevant training functions are exercised by the authority with a view to promoting high standards, and promoting the fulfilment of learning potential by every person to whom the subsection applies, including those who are of compulsory school age or are below school age and are registered as pupils at schools maintained by the authority.
3. Section 14 of the 1996 Act then provides that the Council shall secure that sufficient schools for providing primary education and secondary education are available in the Council’s area. Schools available for an area shall not be regarded as sufficient unless they are sufficient in number, character and equipment to provide for all pupils the opportunity for appropriate education. Appropriate education means education which offers such variety of instruction and training as may be desirable in view of (a) the pupils’ different ages, abilities and aptitudes; and (b) the different periods for which they may be expected to remain at school, including practical instruction and training appropriate to their different needs.

School Standards and Organisation (Wales) Act 2013

4. Part 3 of the School Standards and Organisation (Wales) Act 2013 (“the 2013 Act”) is concerned with school organisation. The Welsh Ministers have issued the School Organisation Code (“the Code”)¹. Local authorities must, when exercising functions under Part 3 of the 2013 Act, act in accordance with any relevant requirements contained in the Code, and must have regard to any relevant guidelines contained in it. The key provisions are summarised in the section on the Code below.
5. Chapter 2 of Part 3 of the 2013 Act deals with school organisation proposals. A maintained school in Wales can only be discontinued in accordance with Part 3 of the 2013 Act.
6. A local authority has the power to make proposals to discontinue various types of schools, including a community school. Section 48(2) of the 2013 Act provides that before publishing such proposals, a proposer (in this case, the Council) must consult on its proposals in accordance with the Code. The consultation document must be issued during the term time of the schools affected and consultees must be given at least 42 days to respond to the document, with at least 20 of these being school days.
7. The proposer must publish a report on the consultation it has carried out in accordance with the Code. The consultation report must summarise each of the issues raised by consultees, responding to these by means of clarification, amendment to the

¹ Welsh Government - School Organisation Code: November 2018

<https://gov.wales/sites/default/files/publications/2018-10/school-organisation-code-second-edition.pdf>

proposal or rejection of the concerns, with supporting reasons; and setting out Estyn's view (as provided in its consultation response) of the overall merits of the proposal.

8. If a local authority decides to proceed with a proposal to discontinue a maintained school, it must publish proposals to that effect in accordance with the Code (section 48). The proposal must be published by way of statutory notice. Chapter 4 of the Code sets out specific requirements as to how statutory proposals must be published. Proposals must be published on a school day and the objection period must include 15 school days (in addition to the day on which it is published).
9. Section 49 of the 2013 Act makes provision for any person to object to proposals published under section 48 within the objection period of 28 days. The Council must then publish a summary of all objections made to the proposal and its response to those objections before the end of 7 days beginning with the day of the Council's determination.
10. The local authority proposer must then determine whether the proposals should be implemented. Where a local authority's proposals have received objections, and require determination, those objections will be carefully considered before a final determination is made. A further report to Cabinet will be prepared before any such determination is made. This determination must take place before the end of 16 weeks beginning with the end of the objection period.

The Code

11. The Code contains the following elements:

- It imposes requirements in accordance with which relevant bodies (including all local authorities in Wales) must act. Where mandatory requirements are imposed by the Code or by the 2013 Act or another statute or statutory instrument, it is stated that the relevant bodies must comply with the particular provision. Where practices are prohibited, it is stated that the relevant bodies must not use this practice.
 - It includes statutory guidance to which the Council must have due regard and sets out the policy context, general principles and factors that should be taken into account by those bringing forward proposals to reconfigure school provision and by those responsible for determining proposals. Where guidance is given by the Code, it is stated that relevant bodies should follow this guidance unless they can demonstrate that they are justified in not doing so.
12. Paragraph 1.1 of the Code sets out the key background principles and policies, which should be taken into account by the Council in developing school organisation proposals. These include:
- United Nations Convention on the Rights of the Child;
 - A living language: a language for living – Welsh Language Strategy 2012-2017
 - Welsh- medium Education Strategy;
 - One Wales: One planet, a new sustainable development scheme for Wales May 2009 or any successor strategy;
 - Child Poverty Strategy for Wales (issued February 2011 Information document number 95/2011), or any successor strategy;
 - Faith in Education.

13. In addition, when developing school organisation proposals, the local plans to which Council should have regard include the following:
- Local plans for economic or housing development;
 - Welsh in Education Strategic Plans (made under part 4 of the 2013 Act);
 - Children and Young People’s Plans (or successor plans)
 - 21st Century Schools – Capital Investment Programme and the relevant wave of investment.
14. Finally, the Council should have regard to the following Welsh Government Guidance on related matters:
- Learner Travel Operational Guidance²
 - Measuring the capacity of schools in Wales, Circular³.
15. Chapter 1 then lists a number of factors which should be taken into account by relevant bodies, including the Council, when exercising their functions of preparing and publishing school organisation proposals or approving/determining them. These factors include:
- Quality and standards in education (looking at outcomes, provision, leadership and management) at the school which is the subject of the proposals, and at any other school or educational institution which is likely to be affected. The Code states that local authorities should place the interests of learners above all others. Where proposals involve the transfer of learners to alternative provision, there should normally be evidence that the alternative would deliver outcomes and offer

² Learner Travel Statutory Provision and Operational Guidance: 2014 - <http://gov.wales/docs/det/publications/140616-ltogg-en.pdf>

³ Measuring the capacity of schools in Wales, Circular - <https://gov.wales/docs/dcells/publications/111104measuringcapacityen.pdf>

provision at least equivalent to that which is currently available to those learners.

- The need for places and the impact on accessibility of Schools (whether alternative school based provision will have suitable capacity and provide accommodation of at least equivalent quality and is sufficient to meet existing demand and projected demand and the nature of journeys to alternative provision and resulting journey times for pupils, including SEN pupils. In particular, whether primary school pupils will have one way journeys in excess of 45 minutes or secondary school pupils one way journeys of over an hour.
- Resources of education and other financial implications. This involves a consideration of a number of factors set out in the Code, including whether proposals ensure a fairer and more equitable distribution of funding between mainstream schools, what effect proposals will have on surplus provision, the costs of proposals (including additional transport costs), any projected net savings, any budget deficits of schools affected and whether the proceeds of sales of redundant sites remain in the education budget.

16. The Code also lists other general factors which should be taken into account, namely educational attainment, equality issues, charitable interests (paragraph 1.6). A list of specific factors in the consideration of school closures is at paragraph 1.7. This states that there is no presumption in favour or against the closure of any type of school. The case for closure should be robust and in the best interests of educational provision in the area. A Community Impact Assessment should be obtained. When considering whether closure is appropriate, special attention should be given to the matters set out on pg 12 of the Code, including :

- considerations of alternatives to closure, including multi-site schools, clustering/collaboration/federation with other schools
 - the overall effect of closure on the local community
 - how parent's and pupil's encouragement with the alternative school and any facilities it may offer could be supported
17. In addition to the usual considerations in relation to standards of provision, the Council should also consider
- whether proposals will improve standards of accommodation for pupils with SEN, including building accessibility;
 - how proposals will address any health, safety and welfare issues;
 - how proposals, where appropriate, will support increased inclusion; and
 - the impact of proposals on other SEN provision within the immediate and wider local authority area including out of county where appropriate
 - whether there is a need for a particular type of SEN provision within the area;
 - whether there is surplus SEN provision within the area;
 - whether SEN provision would be more effective or efficient if regional provision were made; and
 - the impact of proposals on the transportation of learners with SEN
18. The list of factors to be taken into account in approving/determining school organisation proposals is listed at paragraph 1.14.

Public Sector Equality Duty

19. The public sector equality duty (see section 149 of the Equality Act 2010) came in to force in April 2011. Public authorities like the

Council are required, in carrying out their functions, to have due regard to the need to three equality needs set out under s149 of the Equality Act 2010 to:

- eliminate discrimination (both direct and indirect discrimination), harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010;
- advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it; and
- foster good relations between persons who share a relevant protected characteristic and persons who do not share it

20. Direct discrimination occurs if, because of a protected characteristic, a local authority treats a person less favourably than it treats or would treat others.

21. Indirect discrimination occurs if a local authority applies to a person a provision, criterion or practice which is discriminatory in relation to a relevant protected characteristic of that person (“B”). A provision, criterion or practice is discriminatory if –

- The local authority applies, or would apply, it to persons with whom B does not share the characteristic,
- It puts, or would put, persons with whom B shares the characteristic at a particular disadvantage when compared with persons with whom B does not share it;
- It puts, or would put, B at that disadvantage, and
- The local authority cannot show it to be a proportionate means of achieving a legitimate aim.

22. In short, indirect discrimination would arise if a local authority applies the same provision, criterion or practice to everyone, but it puts those in a certain protected group at a “particular

disadvantage” when compared with persons who are not in that protected group. Even if a “particular disadvantage” arises, indirect discrimination does not arise if the provision, criterion or practice can be justified – i.e. if it is a proportionate means of achieving a legitimate aim. Members must pay due regard to any obvious risk of such discrimination arising in respect of the decision before them. These matters are examined in Appendix E and summarised in the Equality Impact Assessment section of the Cabinet report.

23. Having due regard to the need to advance equality of opportunity includes having due regard to the need to remove or minimise disadvantages suffered by them. Due regard must also be had to the need to take steps to meet the needs of such persons where those needs are different from persons who do not have that characteristic, and to encourage those who have a protected characteristic to participate in public life.
24. The steps involved in meeting the needs of disabled persons include steps to take account of the persons’ disabilities.
25. Having due regard to ‘fostering good relations’ involves having due regard to the need to tackle prejudice and promote understanding.
26. Complying with the duty may involve treating some people better than others, as far as that is allowed by the discrimination law.
27. The equality duty arises where the Council is deciding how to exercise its statutory powers and duties under the 1996 Act and the 2013 Act. The Council’s duty under Section 149 of the Act is to have ‘due regard’ to the matters set out in relation to equalities when considering and making decisions in relation to its statutory duties under those Acts. Accordingly due regard to the need to

eliminate discrimination, advance equality, and foster good relations must form an integral part of the decision making process. Members must consider the effect that implementing a particular decision will have in relation to equality before making a decision. The council must have an adequate evidence base for its decision making. This can be achieved by means including engagement with the public and interest groups, and by gathering details and statistics on those who use the schools currently school currently, and how the schools are used. A careful consideration of this assessment is one of the key ways in which members can show “due regard” to the relevant matters.

28. Where it is apparent from the analysis of the information that the proposals would have an adverse effect on equality then adjustments should be made to avoid that effect (mitigation).
29. Members should be aware that the duty is not to achieve the objectives or take the steps set out in s.149. Rather, the duty on public authorities is to bring these important objectives relating to discrimination into consideration when carrying out its public functions (which includes the functions relating to school reorganisations). “Due regard” means the regard that is appropriate in all the particular circumstances in which the authority is carrying out its functions. There must be a proper regard for the goals set out in s.149. At the same time, Members must also pay regard to any countervailing factors, which it is proper and reasonable for them to consider. Improving the quality of education in the Council’s area, making schools more efficient, budgetary pressures and practical factors will often be important. The weight of these countervailing factors in the decision making process is a matter for members in the first instance.

30. The duty covers the nine protected characteristics: age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation. However, section 149, so far as relating to age, does not apply to the exercise of a function relating to the provision of education to pupils in schools (see paragraph 1 of Schedule 18 to the 2010 Act).
31. The Council must also comply with the specific equality duties imposed by the Equality Act 2010 (Statutory Duties)(Wales) Regulations 2011, SI 2011/1064 (“the Regulations”), particularly regulation 8 (imposing specific duties to make arrangements for assessing the impact of its policies/practices and monitoring of the same).

Wellbeing of Future Generations (Wales) Act 2015

32. The Well-being of Future Generations Act 2015 (“the 2015 Act”) requires the Council to think about the long-term impact of their decisions, to work better with people, communities and each other and to prevent persistent problems such as poverty, health inequalities and climate change.
33. To make sure we are all working towards the same purpose, the 2015 Act puts in place seven well-being goals on the Council . The 2015 Act makes it clear the listed public bodies must work to achieve all of the goals, not just one or two, these being:
 - A prosperous Wales
 - A resilient Wales
 - A healthier Wales
 - A more equal Wales
 - A Wales of cohesive communities
 - A Wales of vibrant culture and Welsh Language
 - A globally responsible Wales

34. The 2015 Act imposes a duty on all public bodies in Wales to carry out “sustainable development”, defined as being, "The process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals." The action that a public body takes in carrying out sustainable development includes setting and publishing well-being objectives, and taking all reasonable steps in exercising its functions to meet those objectives.
35. The 2015 Act sets out five ways of working needed for the Council to achieve the seven well-being goals, these being:
- The importance of balancing short –term needs with the needs to safeguard the ability to also meet long-term needs
 - Considering how the Council’s objectives impact upon each of the wellbeing goals listed above
 - The importance of involving people with an interest in achieving the well-being goals and ensuring that those people reflect the diversity of the area which the Council services
 - Acting in collaboration with other persons and organisations that could help the Council meet its wellbeing objectives
 - Acting to prevent problems occurring or getting worse.

NEATH PORT TALBOT COUNTY BOROUGH COUNCIL

Cabinet

21st October 2020

Report of the Head of Property and Regeneration

– S. Brennan

Matter for: Decision

Wards Affected: All Wards

Report Title: Swansea Bay City Deal Digital Infrastructure Project

Purpose of the Report:

1. To approve the proposed Swansea Bay City Deal Digital Infrastructure Business Case and subsequent investment in Digital Infrastructure across the Swansea Bay City Region.
2. That delegated authority be granted to the Head of Property and Regeneration in consultation with the Cabinet Member for Regeneration and Sustainable Development to approve any amendments to the business case that may be required to obtain approval at local, regional and national governance.

Executive Summary:

The Swansea Bay City Deal Digital Infrastructure Project is a regional project led by Carmarthenshire County Council to deliver a programme of investment in the Digital Connectivity and associated Telecommunications Infrastructure of the region. This includes but is not limited to full fibre fixed connectivity and associated infrastructure, 4G, 5G and Internet of Things wireless networks. It is in essence the deployment of enabling technology that will allow quality digital services to be delivered and accessed over fixed line networks or wireless networks.

The Project will deliver the essential underlying Infrastructure required to support and underpin the regions broader Digital Strategy. It will help to ensure that the region is equipped with future-proofed Digital Infrastructure that will provide the transformative foundations for City Deal interventions and wider regional growth. The Project will also help to ensure social inclusion and cohesion in a post Covid19 world.

This ultra-fast ultra-reliable connectivity will help to ensure that the region capitalises on opportunities to accelerate economic growth and establish itself as a centre of excellence in the key sectors of; energy, life science and well-being and smart manufacturing. Future proofed Digital Infrastructure will help will create a paradigm shift in the design, development, and application of technology within these key sectors across the region.

Background:

The Swansea Bay City Deal¹ is a £1.3bn investment in a number of major projects across the Swansea Bay City Region which is made up of Carmarthenshire, Neath Port Talbot, Pembrokeshire and Swansea.

The City Deal is being funded, subject to the approval of project business cases, by the UK Government, the Welsh Government, the public sector and the private sector.

¹ <https://www.swanseabaycitydeal.wales/about/>

City Deal projects are based on key themes of Economic Acceleration, Life Science and Well-being, Energy, and Smart Manufacturing. Each project will be supported by world class digital infrastructure and a Skills and Talent initiative that will give local people a pathway to access the jobs that will be created.

The Digital Infrastructure Project is one of the projects included in the City Deal Heads of Terms document. It is a regional project, led by Carmarthenshire and will deliver across all four City Deal local authority areas.

The Business Plan

A business plan for the Digital Infrastructure Project has been prepared and is enclosed at Appendix I for member's consideration, a summary is included in this report.

The Digital Infrastructure Project of the Swansea Bay City Deal is an investment in the Digital Connectivity and associated Telecommunications Infrastructure of the region. This includes but is not limited to full fibre fixed connectivity and associated infrastructure, 4G, 5G and Internet of Things wireless networks. It is in essence the deployment of enabling technology that will allow quality digital services to be delivered and accessed over fixed line networks or wireless networks.

The Project will deliver the essential underlying Infrastructure required to support and underpin the regions broader Digital Strategy. It will help to ensure that the region is equipped with future-proofed Digital Infrastructure that will provide the transformative foundations for City Deal interventions and wider regional growth. The Project will also help to ensure social inclusion and cohesion in a post Covid19 world.

This ultra-fast ultra-reliable connectivity will help to ensure that the region capitalises on opportunities to accelerate economic growth and establish itself as a centre of excellence in the key sectors of; energy, life science and well-being and smart manufacturing. Future proofed Digital Infrastructure will help will create a paradigm shift in the design, development, and application of technology within these key sectors across the region.

Strategic Case

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There is broad and proven recognition that the provision of digital services drives economic growth and enables social inclusion and cohesion. There is also a growing recognition that the availability of world class digital connectivity stimulates innovation and the creation of new business streams. The clear conclusion is that the Swansea Bay City Deal (SBCD) must address any shortfall in the availability of

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- Environmental benefits through the facilitation of teleworking and enhanced traffic management
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- Enabling digital transformation across the public and private sector
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- social cohesion and inclusion across the region to sustain communities
- stimulate economic growth by enhancing opportunities for employment.

Next Generation Wireless; Ensure that the region is at the forefront of 5G and Internet of Things (IoT) investment and subsequent innovation. This will deliver;

- Inward investment
- Innovation and ensuring the region is at the forefront of new service roll out and delivery
- Economic growth
- stimulate inward investment in the region by telecommunications industry and hence improve access to services for residents and businesses

Economic Case

The Digital Infrastructure Project has three areas in which it will directly deliver in order to drive growth and GVA and to close the digital divides across the region.

Options have been considered for all three areas, ranging from Do-Nothing to significant levels of investment. A preferred option has been identified for all three areas which represents a pragmatic approach that maximises the impact of existing interventions and addresses any significant gaps that these might leave.

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- An investment in public sector owned duct infrastructure and a procurement of commercial owned full fibre infrastructure

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- Programme of supply side engagement to stimulate investment
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- Selected funded interventions and proof of concepts to deliver 5G and IoT connectivity in key locations should be executed under a central SBCD mandate and management

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The commercial case defines the recommended procurement routes, service specifications and commercial and contractual considerations. These are different for each stream and shaped by:

- Stakeholders appetite to invest in public sector assets and infrastructure
- Commercial appetite for inward investment
- Ensuring state aid compliance
- Ensuring investments are complementary to the activities of the PSBA
- Complementary to other national and regional schemes

Financial Case

A summary of the proposed expenditure under each of these three streams is presented in the table below. The table splits out that potentially provided by the SBCD along with commercial investment and likely central government grant funding. It should be noted that commercial investment is likely to emerge in two waves; an initial

direct contribution to the proposed programme plan. In addition, there will be secondary pull through investment by the commercial sector as subsequent investment will be made to enhance and expand the digital infrastructure facilitated by SBCD.

There are strong positive economic and social impacts for all three of the project streams. The analysis undertaken has been careful to apply economic multipliers that have been used in other government programmes to support their business case.

Stream	Total Budget Spend (Revenue and Capital over 5 year)	Direct SBCD Capital Contribution	Direct SBCD Revenue Contribution	Other Public Sector Contribution	Direct Commercial Contribution	Additional Commercial Sector Pull through Investment	Economic Uplift over 15 years from Budget Investment
Rural							
Option 2; Supplier Engagement	0.5	0.0	0.5	0.0	0.0	0.0	
Option 3: Demand Stimulation	5.0	0.0	1.5	3.5	0.0	28.9	17.5
Option 4: In-fill Procurement	20.0	6.0	0.0	10.0	4.0	20.0	70.0
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Options 3/4 Duct Investment /Procurement	20.0	12.0	0.5	0.0	7.5	70.0	220.0
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TOTAL	55.0	20.5	4.5	13.5	16.5	121.9	318.8

The table above summarises the budget spend and investment sources along with associated benefits

It is estimated that the Digital Programme will result in over £120 million of direct and pull through commercial investment and an economic stimulus to the region of over £300 million over the next 15 years.

Management Case

A clear Programme Management structure has been defined consisting of a Digital Infrastructure Project Board reporting to the Programme Board and Joint Committee.

A central Digital Infrastructure Project team will be established to oversee and steer Digital Infrastructure strategy and policy for the region in liaison with UKG, Welsh Government and the private sector. The Project Team is charged with meeting project aims and objectives as set out in the project business case, overseeing risk and governance, maintaining communication and engagement across all sectors, and achieving project outcomes, including community benefits.

This team will be hosted within Carmarthenshire County Council as the lead authority for the Digital Infrastructure Project.

In order to deliver the business plan the Project team will be responsible for the;

- Development of overall digital strategy
- Maximising and coordinating funding opportunities for the Region
- Interaction with Welsh and UK Governments on digital programmes
- Co-ordination and management of regional Digital procurement activities
- Supply side engagement with industry
- Development of regional procurement frameworks and procurement templates
- State aid guidance
- Development of regional guidelines and approach to demand stimulation
- Market analysis and monitoring of infrastructure deployed.

Where required the project team will utilise external legal (for state aid and procurement) and technical support. This central team would

report directly to the project board, project lead authority and Joint Committee as required.

It will also coordinate and draw upon the resources and skills of stakeholders including the local authorities, health boards and universities as required – notably in the course of procurements and demand stimulation activities.

Financial Impacts:

The financial implications associated with the digital infrastructure project will be managed through the projects risk register with associated mitigating actions.

The project is funded through £25m City Deal Funding, £13.5 public sector funding and £16.5 Private sector sending. City deal funding will be release on the successful approval of the project business case by UK and WG Government. Public sector investment will be generated through wider public sector infrastructure funding. Private sector inward investment will be generated by telecom and internet providers investing in and building off the Digital Infrastructure deployed as part of this Project.

Integrated Impact Assessment:

A first stage impact assessment (Appendix II) has been undertaken to assist the Council in discharging its legislative duties (under the Equality Act 2010, the Welsh Language Standards (No.1) Regulations 2015, the Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016. The first stage assessment has indicated that a more in-depth assessment is not required.

Workforce Impacts:

No implications.

Legal impacts:

The Joint Working Agreement between the participants of the Swansea Bay City Deal requires (at clause 12.3) all councils in whose area the project shall take place to approve the submission of the business case to the Joint Committee before it can ultimately be forwarded on to the UK and Welsh Government. Each participant council will be taking a report of this kind to their respective decision makers.

Risk Management Impacts:

There are no risk management issues associated with this report. The Digital Infrastructure Project includes a 'Main Programme Risks' section in Part 1.4.6 (Risks, Constraints and Dependencies) of the Strategic Case.

Consultation:

There is no requirement for external consultation on this item.

Recommendations:

To approve the proposed Swansea Bay City Deal Digital Infrastructure Business Case and subsequent investment in Digital Infrastructure across the Swansea Bay City Region.

To approve delegated authority to the Head of Property and Regeneration in consultation with the Cabinet Member for Regeneration and Sustainable Development to approve any amendments to the business case that may be required to obtain approval at local, regional and national governance.

Reasons for Proposed Decision:

To enable Carmarthenshire to formally submit the Digital Infrastructure Project business case to the Portfolio Management Office in accordance with the City Deal project approval process.

Implementation of Decision

The decision is proposed for the three day call in period.

Appendices:

Appendix I – Swansea Bay City Deal Digital Infrastructure Project
Business Case

Appendix II - Integrated Impact Screening Assessment

List of Background Papers:

None

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Swansea Bay City Deal

Digital Infrastructure Project



Business Case

Draft Version 3.1

August 2020



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¹ Many policy documents and strategic intents from both the UK and Welsh government attest to the criticality, see section 1.5

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- Development of regional procurement frameworks and procurement templates
- State aid guidance
- Development of regional guidelines and approach to demand stimulation
- Market analysis and monitoring of infrastructure deployed.

Where required the project team will utilise external legal (for state aid and procurement) and technical support. This central team would report directly to the project board, project lead authority and Joint Committee as required.

It will also coordinate and draw upon the resources and skills of stakeholders including the local authorities, health boards and universities as required – notably in the course of procurements and demand stimulation activities.

1 Strategic Case

1.1 Strategic Context

1.1.1 Background

The **Digital Infrastructure** project is one of the nine projects within the Swansea Bay City Deal (SBCD). The City Deal was signed by Prime Minister Theresa May and First Minister Carwyn Jones on the 20th March 2017, securing £1.3billion of public and private sector funding over a 15-year programme for economic growth and regeneration for the region.

The Swansea Bay City Region² is a critically important driver for the Welsh and UK economy. It is a region with strong urban centres complemented by a wider rural landscape and a significant coastal footprint that has created a diverse economic profile with numerous opportunities and challenges. With a resident population of 688,000³ supporting some 302,000 jobs and containing around 22,000 businesses, Swansea Bay City Region is a major driver of the Welsh economy. Overall productivity (GVA) growth in the region has been consistently below that of the UK and Wales over the past two decades. It is the key factor underpinning the sub-optimal economic performance and remedying this position is the primary priority of the City Deal.

The key issues to be addressed by the Digital Infrastructure project are mirrored in the overall challenges for the region;

- GVA per employee in the Region was £34,300 in 2015 (at 2011 prices), 74% of the UK average
- Too few businesses and are not growing their business base quickly enough⁴;
- There are not enough people with high level qualifications and too many with none at all;
- Economic inactivity remains too high across the region;
- The physical infrastructure is not keeping pace with the needs of growing businesses or our communities. Broadband capacity and digital connectivity are improving, but not quickly enough. Much of the commercial and retail property is low quality and attracts low rents;
- The city centre of the regional capital is under-performing and needs to deliver a commercial, residential and leisure offer to match the ambitions of the innovation proposals; and

² UK and Welsh Govt Document

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/611685/Swansea_City_Deal_-_English.pdf

³ Swansea Bay City Deal Internet Coast publication

⁴ Bullet points drawn from The Internet Coast, SBCRD 2016-2035: <https://democracy.npt.gov.uk/documents/s20423/City>, part of the underpinning rationale for the Swansea Bay Region City Deal

- The rural and visitor economy, region wide, also needs to deliver a step change in performance if the region as an integrated whole is to achieve its long term aims.

The Swansea Bay City Deal works to address these challenges and capitalise on regional opportunities to accelerate economic growth and establish the region as a centre of excellence in the key sectors of; energy, life science and well-beings and smart manufacturing

Key to the success of the City Deal is a future-proofed Digital Infrastructure that will provide the transformative foundations for City Deal interventions and wider regional growth which will create a paradigm shift in the design, development and application of technology within these key sectors across the region. This Infrastructure will support and underpin the regions broader Digital Strategy and help to ensure social inclusion and cohesion in a post Covid19 world by facilitating provision and access to Digital services.

Improving the Digital Infrastructure of the region is critical⁵ as the region has suffered from a lack of commercial investment in digital infrastructure that consequently has resulted in an underlying gap in delivery capability compared with other regions of the UK. This gap needs to be closed in order for the SBCD to achieve its goals. The proposed programme of work will lead to:

- An increase in local productivity and employment
- An uplift in the region's attractiveness for both the telecommunications industry and subsequent inward investment by highly skilled digital intensive industries
- An enhanced ability to deliver local services, notably education, health and transport
- Environmental benefits through the facilitation of teleworking and enhanced traffic management
- A reduced gap in access to digital services across the region, notably to isolated communities
- Enabling and accelerating digital transformation across the public and private sector
- Ensuring the cities and development zones of the region obtain a competitive advantage against some other parts of the UK.

It is acknowledged that all the above benefits will not solely be a direct impact of digital infrastructure, however a failure to address the gaps in digital infrastructure and services will place a sever burden on the achievement of the improvements and gains anticipated within the wider City Deal.

⁵ Many policy documents and strategic intents from both the UK and Welsh government attest to the criticality- see section 1.5

1.12 Organisational Overview

The Swansea Bay City Deal (SBCD) is a £1.3bn investment in 9 major projects across the Swansea Bay City Region – which is made up of Carmarthenshire, Neath Port Talbot, Pembrokeshire and Swansea.

The Swansea Bay City Deal⁶ is being led by the four regional local authorities - Carmarthenshire Council, Swansea Council, Neath Port Talbot Council and Pembrokeshire Council - together with the Abertawe Bro Morgannwg and Hywel Dda University Health Boards, Swansea University, the University of Wales Trinity Saint David, and private sector partners.

An overview of each of the partners is provided below to set the context for this investment proposal.

Carmarthenshire County Council (CCC)

Carmarthenshire is the lead local authority for this programme.

Carmarthenshire has a track record of delivering large scale regeneration programmes for example:

- South West Wales Property Development Fund – £25m
- South West Wales Local Investment Fund – £20m
- Cross Hands East development £13m
- Carmarthenshire Physical Regeneration programme – £11m
- 21st Century Schools Programme
- Vibrant & Viable Places (Welsh Government regeneration programme)

Carmarthenshire facts:

- formed in 1996 after local government reorganisation
- it is the third largest county in Wales covering some 2,365km with a population of 184,681

Neath Port Talbot County Borough Council (NPTCBC)

Neath Port Talbot CBC has a proven track record of managing and delivering large capital programmes, including European structural fund projects, Welsh Government funded projects and other externally funded projects, for example:

- PDR Harbour Way – £111m
- 21st Century Schools Programme - £122m
- Neath Port Talbot Physical Regeneration – £15m
- Vibrant & Viable Places – £35m

NPTCBC key facts:

- formed in April 1996 after local government reorganisation

⁶ <https://democracy.npt.gov.uk/documents/s20423/City>

- it is an amalgamation of the former Neath and Port Talbot Borough Councils with parts of Lliw Valley Borough Council and West Glamorgan County Council
- the 8th most populous local authority areas in Wales
- 40k population (2011 census)
- 7 areas are within the top 10% most deprived in Wales

City and County of Swansea (CCS)

Swansea Council has a track record in delivering large scale regeneration programmes, having been involved in the management and delivery of such programmes since its formation in 1996.

Programmes funded and delivered by the Council have included:

- Construction of the Liberty Stadium for Swansea City Football Club & Ospreys Rugby Club
- A £32m Leisure Centre in the city centre
- Joint ventures progressed with Welsh Government (and formerly WDA) to deliver:
- Swansea Vale Mixed Use Development
- Felindre Strategic Business Park

Over £120 million of programmes were facilitated during the EU Objective 1 2000-2006 programme including landmark schemes such as the National Waterfront Museum (£28m total cost).

During the Convergence 2007-2013 programme period, a series of large scale initiatives were delivered including:

- Quadrant Bus Station £ 10m
- Waterfront City, which invested £ 30m in a range of improvements to the fabric of the city centre including major public realm and property façade alterations

Swansea Council key facts:

- formed in 1996 after local government reorganisation
- it is the second largest Local Authority in Wales (with a population of 244,513 in 2016)
- it has some of the most deprived areas in Wales, with 12.2% of Lower Super Output Areas (18 of 148) in the top 10% most deprived in Wales

Pembrokeshire County Council (PCC)

Pembrokeshire County Council has a track record in delivering large scale regeneration programmes including:

- Withybush Strategic Development Site (business Infrastructure and access roads)
- Advance build Factory Programme
- Pembrokeshire Technium Development
- Several European Social Fund regional collaborative projects
- 21st Century Schools programme
- Haverfordwest Leisure Centre

- Bulford Road
- Pembroke and Pembroke Dock Physical Regeneration project
- Coastal Tourism Centre of Excellence
- One Historic Garden
- Haverfordwest Townscape Heritage Initiative

The Joint Committee of the SBCD will be responsible and accountable for all financial, staffing, and legal decisions in the delivery of the deal. The Joint Committee will make decisions on City Deal funding based on business cases for specific interventions and the advice of the private sector Economic Strategy Board.

The Joint Committee will also embrace the wider opportunities presented through a regional approach to strategic functions such as planning, transport and economic development.

All interventions will be subject to the submission of detailed business cases and approval by the Welsh and UK Governments⁷.

A project delivery structure is provided in the Management Case that will report through to the Joint Committee. The roles and responsibilities of the delivery team will be further defined within the recruitment proposals.

1.1.3 Alignment to existing policies and strategies

Digital transformation and Digital Infrastructure features in a very wide range of strategies across UK Government, Welsh Government and Local Authorities. This is matched by transformation programs within the private sector ranging from Communications Service Providers, (CSPs), themselves to Industry 4.0.

⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/611685/Swansea_City_Deal_-_English.pdf

UK Strategy	Strategic Intent Summary	Digital Infrastructure Fit	Link
The Grand Challenges DBEIS	Put the UK at the forefront of the AI and data revolution	AI and Data require widespread and high capacity digital connectivity	https://www.gov.uk/government/publications/industrial-strategy-the-grand-challenges/industrial-strategy-the-grand-challenges
	Harness the power of innovation to help meet the needs of an ageing society	Key enabler is technology that has fixed and mobile connectivity widely available and high capacity	
	Maximise the advantages for UK industry from the global shift to clean growth	Reduction in the need to travel and the 'Smart' control of energy systems	
	We will become a world leader in shaping the future of mobility	Mobility demands high capacity and widespread mobile communications	
UK Digital Strategy DCMS	Building World Class Digital Infrastructure, including full fibre and 5G	A central part of what Digital Infrastructure project will deliver	https://www.gov.uk/government/publications/uk-digital-strategy
	Give everyone access to the digital skills they need	Widespread deployment and hot-spots of 5G will drive the development of skills	
	Making the UK the best place to start and grow a digital business	Digital Infrastructure is a pre-requisite, alongside the other central SBCE projects in digital media	
	Helping every British business become a digital business	Making high quality digital connectivity widely available is a critical enabler	
	Maintaining the UK government as a world leader in serving its citizens online	Digital transformation requires digital infrastructure to deliver the services	
	Unlocking the power of data in the UK economy	Data analytics is core to new digital services	
Future Telecoms Infrastructure DCMS	Fixed and mobile networks will be the enabling infrastructure that drives economic growth	The Digital Infrastructure project is based upon this	https://www.gov.uk/government/publications/future-telecoms-infrastructure-review
	Nationwide Full Fibre connectivity, there must be a sharp increase in the pace of full fibre roll out	Full Fibre is a one of the key objectives under the connected Cities element of Digital Infrastructure project	
	Making the cost of deploying fibre networks as low as possible by addressing barriers to deployment	Part of Digital Infrastructure is the deployment of publicly owned infrastructure assets to reduce roll out costs	
	Supporting market entry and expansion by alternative network operators	Open procurements are planned for all Digital Infrastructure	
	An 'outside in' approach to deployment that means gigabit-capable connectivity across all areas of the UK is achieved at the same time	Rural connectivity is a key objective of Digital Infrastructure project	
	A switchover process to increase demand for full fibre services	Demand and Supply simulation are both planned within Digital Infrastructure	
	We want the UK to have high quality mobile connectivity where people live, work and travel	Support for supply side actions and lowering build costs for 4G are included	
	Alongside finishing the roll out of 4G networks to meet existing mobile demand, we want the UK to be a world leader in 5G	Construction of 5G hot-spots is a key objective	
5G Strategy for the UK DCMS	Government has a clear ambition for the UK to be a global leader in the next generation of mobile technology – 5G	5G in support of specific and key projects in included	https://www.gov.uk/government/publications/next-generation-mobile-technologies-a-5g-strategy-for-the-uk
	Digital infrastructure is a building block of the Government's modern Industrial Strategy	Several aspects of the SBCE deal and specifically Digital Infrastructure addresses this directly	
	Deliver three main outcomes: • accelerating the deployment of 5G networks • maximising the productivity and efficiency benefits to the UK from 5G • creating new opportunities for UK businesses at home and abroad, and encouraging inward investment	Accelerating deployment through direct intervention and supporting infrastructure roll-out Projects will demonstrate productivity and efficiency gains across several sectors Availability of leading edge connectivity through Digital Infrastructure project will encourage inward investment	

Table 1 - Key UK strategies

UK Strategy	Strategic Intent Summary	Digital Infrastructure Fit	Link
Digital Strategy and Leadership DCMS	<p>Developing a local digital infrastructure strategy:</p> <ul style="list-style-type: none"> • A senior digital champion to lead the process • Bringing together local teams involved in deployment of digital infrastructure • Putting in place the required skills and resources • Collaborating with network providers 	<p>A central SBCD team under a single leadership is proposed</p> <p>Coordination of the 4 Local Authorities is proposed</p> <p>Development and recruitment of key skills and resources is proposed</p> <p>Working closely with communications Service Providers is proposed</p>	<p>https://www.gov.uk/guidance/digital-strategy-and-leadership</p>
5G Briefing Paper - UK Parliament	<p>Gives a date of 2027 for most of the UK POPULATION to have 5G coverage</p> <p>Acknowledges the need for wider fibre deployments to support 5G</p> <p>Acknowledges the costs and commercial risks for MNOs to roll out 5G</p>	<p>The papers are more aspirational than concrete requirements on CSPs to roll out 5G. However, the commitments are there and engagement by the SBCD team with the intent and how these evolve into full policy and perhaps intervention funding should be kept under constant review</p>	<p>https://www.researchbriefings.files.parliament.uk/documents/CBP_07883</p>
SRN Ofcom Notice of 4G Coverage Compliance	<p>SRN is a joint agreement with MNOs to cover the UK with 4G services, Match funded £1bn</p> <p>90% of the UK Landmass must be covered</p> <p>87% of Wales landmass must be covered</p> <p>Baselined in 2020, additional coverage must be in Not-Spots</p>	<p>The timescales for SRN are unclear, 14 years is identified as the period this will apply, but no end date is given for the 88% or 90%+</p> <p>The SBCD team would have the opportunity to examine the proposals of the MNOs for coverage in Q3/4 of 2020 and thereby lobby for changes or to be early in additional deployments</p>	<p>https://www.ofcom.org.uk/_data/assets/pdf_file/0031/192919/notice-of-compliance-verification-methodology.pdf</p>
Innovate UK, Industrial Challenge Fund DBEIS	<p>Next Generation services are predicated on leading edge digital infrastructure</p> <p>Transforming construction envisages digital design and IoT</p> <p>Robotics across a wide number of sectors</p> <p>Next Generation services for AI and embedded digital technology</p> <p>Leading edge healthcare, including digital technologies</p> <p>Driverless Cars</p> <p>Creative Industries clusters</p>	<p>Includes digital technologies as a key component which will require leading edge connectivity in fibre and 4G/5G</p> <p>Distributed design and IoT are all included in the project</p> <p>Robotics require leading edge fixed and mobile connectivity</p> <p>AI and analytics require leading edge fixed and mobile connectivity</p> <p>Healthcare requires leading edge fixed and mobile connectivity, particularly the new wave of wearable devices</p> <p>Autonomous vehicles need widespread 5G</p> <p>Creative industries are primarily digitally based and need leading edge fixed and mobile connectivity</p>	<p>https://www.gov.uk/government/collectio ns/industrial-strategy-challenge-fund-joint-research-and-innovation</p>
Catapults	<p>Various Streams, including: Digital, Energy, Future Cities, High Value Manufacturing, Offshore renewable energy and transport systems</p>	<p>Although these are not government entities, they are closely linked with Innovate UK and act as a delivery partner in many cases. A large number of their interest areas align directly with the Digital Infrastructure project</p>	<p>https://catapult.org.uk/catapult-centres/</p>

Table 2 - Key UK Strategies – cont.

Wales Strategy	Outline	Fit	Link
Well-being of Future Generations (Wales) Act 2015	A prosperous Wales	Directly supports the goal through delivering innovation, low carbon, expands skills and employment to new high-value roles	
	A resilient Wales	Supports economic change through digital transformation	
	A healthier Wales	Supports technology's part in delivering health of the nation	http://futuregenerations.wales/about-us/future-generations-act/
	A more equal Wales	Supports the removal of the digital divide across all sectors	
	A Wales of cohesive communities	Supports well connected communities and governments	
Well-being of Future Generations (Wales) Act 2016 5 Ways of Working	Long Term - Balancing short term needs with safeguarding the long term needs	Digital infrastructure is a long term investment that enables transformative actions at many levels	
	Prevention - Preventing problems occurring or getting worse	Digital service delivery represents an opportunity to improve services and a stable platform for future change	
	Integration - Impact of Well-Being objectives may have on their objectives or other's	Digital infrastructure is a critical enabler across many sectors and makes integration simpler and more effective	http://futuregenerations.wales/about-us/future-generations-act/
	Collaboration - Working with others	Digital collaboration opens significant new opportunities to involve people and organisations in working together	
Digital First Welsh Government	Involvement - An inclusive approach to involving people in achieving the goals	Part of the project is to deliver digital inclusion, a fundamental to opening opportunities for involvement across the widest breadth of participants	
	Helping the public sector provide excellent online digital services to the people and business of Wales	Delivering online services requires digital connectivity to those services, through fixed and mobile networks being supported by the project	
	Seek to develop the infrastructure required to support digital service delivery	A key element of the infrastructure is the digital connectivity with the right coverage and quality, both delivered by the project	https://gov.wales/topics/science-and-technology/digital/public-services/digital-first/?lang=en
Delivering Digital Inclusion Welsh Government	Digital Transformation forms a central part of the Welsh Government's plans to make public services more meaningful to users	Digital Transformation is enabled and driven by the availability of digital infrastructure	
	To ensure that everyone who wants to be online can get online, protect themselves and their friends and families online and do more online to fully benefit from the opportunities the internet and other digital technologies offer	The Digital Infrastructure project is directly focused on this vision and expands upon it to ensure everyone has network access, but also that access meets the demand of the user, including ultrafast and full fibre links and 4G/5G links	https://gov.wales/docs/dsilg/publications/comm/160316-digital-inclusion-strategic-framework-en.pdf
Mobile Action Plan Welsh Government	The planning system has a key part to play in maximising mobile phone coverage across Wales	Specific proposals are made related to a central SBCD function to support efficient planning processes	
	The public sector in Wales has thousands of assets that could be used to site mobile telecommunications infrastructure on public land, public highway and buildings	Specific proposals are made related to a central SBCD function to support efficient asset management processes	
	The topography and population density in Wales throws up specific challenges for mobile coverage. Extending coverage as far as possible is likely to require innovative solutions particularly in rural areas.	The use of new ways to achieve rural connectivity is included for both fixed and wireless technologies	https://gov.wales/topics/science-and-technology/digital/infrastructure/mobile-action-plan/?lang=en
	The investment being made by the mobile industry towards regulatory targets will significantly improve mobile connectivity in Wales both in terms of voice and data. However, it is likely that there will still be areas of Wales without a usable and reliable mobile signal	A central team is proposed for SBCD to act as a voice for the region in both investment and regulatory compliance and to work with the Emergency Service coverage requirements	

Table 3 - Key Welsh Strategies

Wales - Health	Strategy	Outline	Fit	Link
Digital Wales Welsh Government	Inclusivity: Making sure everyone can enjoy the benefits of technology is a key part	Digital Infrastructure project has a key objective of the widest possible connectivity services		
	Skills: We will use technology to improve teaching methods and learning. Beyond schools, we will ensure that everyone in Wales can acquire the basic skills and confidence to get online and use digital technologies.	Utilising technology for skills and education requires underpinning digital infrastructure of the highest quality as delivery moves into video and augmented reality, both considerations for the project		
	Economy: We want to drive economic growth. We will support Welsh companies to network with research departments to create and commercialise new digital technologies. We will help more Welsh companies to exploit these developments to innovate, grow and access new markets, especially in our priority sectors	Leading edge digital infrastructure will support inward investment and innovation directly	https://gov.wales/topics/science-and-technology/digital/?lang=en	
	Public services: We will make more public and government services digital so they are easier to access	Digital Transformation in services requires access via digital networks		
	Infrastructure: To deliver all the benefits of digital technology, we aim to ensure that all residential premises and businesses in Wales will have access to high speed broadband. We will continue to work to eliminate 'not spots' and to ensure that there is fair and equal access to higher speed broadband and to improve mobile coverage	A fundamental aspect of the project is to ensure the widest possible coverage of both fixed and mobile communications		
Informed Health and Care - Wales	This strategy outlines how we will use technology and greater access to information to help improve the health and well-being of the people of Wales. It describes a Wales where citizens have more control of their health and social care, can access their information and interact with services online as easily as they do with other public sectors or other aspects of their lives, promoting equity between those that provide and those that use our services in line with prudent healthcare and sustainable social services.	Digital Infrastructure is a direct enabler of all the strategic objectives within this Digital Health and Social Care Strategy for Wales.	Specifically, some of the proposed projects under the 5G and IoT actions are directly involved with health projects such as the Well Being village. Generally, an supporting the widest deployment of digital infrastructure, many of the strategic aims become easier to deliver and maintain.	https://gov.wales/docs/dhss/publications/151211reporten.pdf
	Information for You	Wider digital access directly promotes this aim		
	Supporting Professionals	System integration directly is supported		
	Improvement & Innovation	Service change and data availability directly supported		
The Parliamentary Review of Health and Social Care in Wales Transforming Health and Care in Wales	The current situation is of great concern for service users, health and care organisations, health and social care workers, and society more broadly. Health and social care services experience workforce shortages; Wales' outcomes for health and care are not improving as fast as desired; and service delivery is not consistently good.	Recommendations 7 - Harnessing innovation and accelerate technology and infrastructure developments is directly supported. Digital Infrastructure is a critical enabler to achieve this recommendation.	Recommendation 8 - Align system design to achieve results. Transformative change happens at several levels, but digital transformation of services is a key driving force that is supported directly by the actions in this business case.	
	In this final report, we recommend to the Welsh Government some key actions that need to be taken to do that, including: clarifying what a set of new models of care might look like; strengthening the power of citizens and users to make change; improving the local leadership and governance needed to implement change; harnessing digital, scientific, technological and infrastructure developments to underpin modernised models of care as well as unlock efficiencies; and at a national level designing the system to expedite and incentivise progress through increased transparency.		https://beta.gov.wales/sites/default/files/publications/2018-01/Review-health-social-care-report-final.pdf	

Table 4 - Wales Health

Authority Strategy	Outline	Fit	Link
Swansea Bay City Deal	A future-proofed digital infrastructure will provide the transformative foundations for interventions in the Deal	The Digital Infrastructure project is a direct response to the needs of the underlying themes and objectives of the SBCD	
	The Internet of Economic Acceleration. To deliver a coherent and integrated economic development strategy for the region that incorporates next generation digital infrastructure		
	The Internet of Life Science & Well-Being. Expansion of research and innovation infrastructure and the piloting of a digitally integrated healthcare environment		https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/611685/Swansea_City_Deal_-_English.pdf
	The Internet of Energy. Areas of sustainable house building and in the creation of a centre of excellence to develop and exploit aspects of marine and other energy		
Swansea Bay City Region Regeneration Strategy	Smart Manufacturing. To support digital assets and research and development provision under Industry 4.0 and innovation capability to support R&D within the steel industry in Wales and the wider UK.		
	By 2030, South West Wales will be a confident, ambitious & connected City Region, recognised internationally for its emerging Knowledge and Innovation economy	Knowledge and innovation are strongly supported by digital infrastructure and digital services. The delivery of both are primary objectives for the Digital Infrastructure project	
	Strategic Aim 1: Business Growth, Retention & Specialisation	Inward investment can be made more attractive by the availability of high quality digital infrastructure. Digital sector businesses tend to drive higher value jobs	
	Strategic Aim 2: Skilled & Ambitious for long-term success	Digital Transformation affects many sectors and will drive skills and resources to meet the demand. Digital infrastructure is a key enabler for the transformation process	https://www.swansea.gov.uk/swanseabaycityregioneconomicregenerationstrategy
	Strategic Aim 3: Maximising job creation for all	High quality digital infrastructure stimulates innovation and digital/media clusters, creating new opportunities	
Neath Port Talbot Digital Strategy	Strategic Aim 4: Knowledge Economy and Innovation	First class digital infrastructure is a prerequisite for any knowledge and innovation based approach	
	Strategic Aim 5: Distinctive Places and Competitive Infrastructures	The project directly supports the widest access to next generation fixed and mobile broadband, including 5G	
	A better everyday life for everyone in Neath Port Talbot by being smart and connected, Outcomes Expected:	All of the objectives are addressed by the Digital Infrastructure project.	
Carmarthenshire County Council Digital Transformation Strategy	<ul style="list-style-type: none"> State of the art digital infrastructure and next generation wireless connectivity; Creation of new digital commercial opportunities Creation of smart manufacturing capabilities; Improved digital skills base; New employment opportunities for local people; Wider economic growth; Reduction in energy costs; Alleviation of fuel poverty; Improved well-being Greater equality in service access and outcomes; Reduced carbon footprint; Fewer people digitally excluded; 		https://www.npt.gov.uk/media/9938/smart_and_connected_strategy_draft_aug_2018.pdf
	<ul style="list-style-type: none"> Provide transactional services and information online in a user-friendly and inclusive way. Use technology to change the way traditional face-to-face services are delivered, enabling us to deliver effective and efficient services for our residents. Create a digital workforce which is agile, mobile and using the most appropriate technologies to support service delivery. Support our residents to use digital technology and enable access to technology for those that do not have it. Support our businesses to compete in the digital economy. Use digital technology to work and collaborate with our partners seamlessly, including the effective sharing and use of data. 	All of the objectives are addressed by the Digital Infrastructure project.	http://democracy.carmarthenshire.gov.wales/documents/s13030/REPORT.pdf
Swansea Council Regeneration Strategy	Has direct links to the City Deal, but highlights City Centre Regeneration The Kingsway Co-Operative Housing Beyond Bricks & Mortar	Several aspects of the strategies are related to digital infrastructure improvements	https://www.swansea.gov.uk/regenerationplans

Table 5 - Key Regional Authority Strategies

1.2 Case for Change

1.2.1 Spending Objectives

SBCD will need to work alongside the UK Government, the Welsh Government, Local Authorities, and industry to deliver world class, high-quality, full fibre and wireless digital services across the region.

'Our vision is that by 2035 the Swansea Bay City Region will be recognised internationally as a lead innovator in developing and commercialising applications using the transformational economic power of digital economy. The Swansea Bay City Deal (SBCD) aims to put the region at the forefront of the digital age and fourth industrial revolution; where value is created by knowledge extracted from vast data resources, the internet of things and communications mobility. These are the factors that will fundamentally change and enhance the way we work and live'.

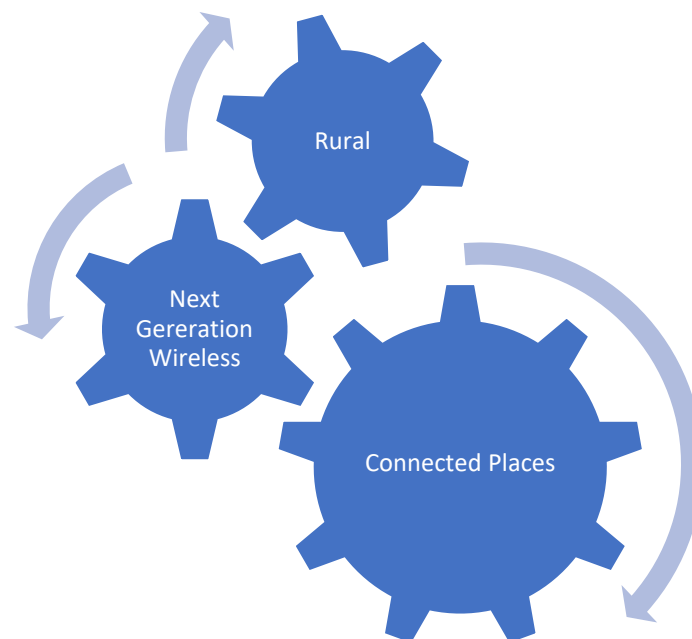
Cllr Rob Stewart, Chair of the Swansea Bay City Deal Joint Committee

City Deal's Digital Infrastructure will deliver its objectives by supporting intervention in specific areas and for specific projects through a combination of connectivity types, depending on what is most suited. It must be remembered that the Digital Infrastructure project rests within a dynamic service provision environment, operated by large independent private sector organisations. It also exists within a number of existing digital infrastructure intervention programmes operated by the UK and Welsh governments.

The region is not homogenous in its requirements and challenges, with the investment priorities reflecting this. In order to give a focus on the region's needs and the manner in which they can be met, three intervention areas have been identified to be delivered through the Digital Infrastructure project. These are:

- **Connected Places:** Targeted at the main urban and economic development centres within the region to realise a full fibre network of connectivity.
- **Rural;** Addressing the market failure to provide many rural communities with broadband that reaches at least the UK standard.
- **Next Generation Wireless;** Targeted at the early deployment and use of 4G-Adv and 5G to support use cases across the City Deal aims and region wide.

Each area deals with a different regional challenge and calls upon different mixes of digital infrastructure to overcome them. However, all are complimentary and interdependent. All three Digital Infrastructure deployment types are complimentary and importantly amplify each other. Strong and widespread fibre deployments is a precursor for advanced mobile services, while many Use Cases are enhanced by the fact that they are able to deliver through both fixed and mobile applications and services.



In order to address these issues SMART investment objectives have been defined for each of these three areas as follows:

- **Connected Places; Ensures towns, cities and development zones have access to world class full fibre infrastructure.** This will deliver the following spending objectives:
 - improve the quality of public service delivery by ensuring all public buildings are digitally connected facilitating improved efficiency and public access to services
 - cost savings to the public sector for digital connectivity
 - stimulation of competition in digital services
 - stimulate inward investment in the region by telecommunications industry and hence improve access to services for residents and businesses
 - deliver economic benefits through the usage of digital infrastructure, notably increased efficiency and enhanced productivity.

- **Rural: Facilitate equality of access to broadband services across the region.** This will deliver the following spending objectives;
 - improve the quality of public service delivery by ensuring communities in remote areas have access to services
 - social cohesion and inclusion across the region to sustain communities
 - stimulate economic growth by enhancing opportunities for employment.

- **Next Generation Wireless; Ensure that the region is at the forefront of 5G and Internet of Things (IoT) investment and subsequent innovation.** This will deliver;
 - Inward investment
 - Innovation and ensuring the region is at the forefront of new service roll out and delivery
 - Economic growth

Harmonising with meeting City Deal challenges, Digital Infrastructure can be seen as a core part of the ecosystem for driving up GVA, Skills and Jobs⁸.

The Digital Infrastructure project represents the building of a critical **enabling** digital environment within which a wider, but completely complimentary, set of strategic aims can be articulated;

1. existing businesses exploiting Digital Infrastructure applications to generate **productivity improvements**
2. existing businesses exploiting Digital Infrastructure applications to **innovate new business models⁹ and open new markets**
3. **new business start-ups** capitalising on Digital Infrastructure to operate new digitally dependent business models at lower cost and more flexibly than established businesses
4. economic and employment impacts associated with any new **network infrastructure build**, including ongoing network and application support
5. **Skills development** across digital sectors to drive higher value employment opportunities
6. a rise in **new working practices**, enabled through Digital Infrastructure¹⁰, communications/conferencing/collaborative tools, applications and delivering additional digital transformation benefits
7. Opening the way for **teleworking to stimulate Rural business models** which positively impacts the environment, maintaining communities, as well as job creation through distributed working
8. **private household benefits**, via increases in house price and housing wealth
9. **Sustaining communities** through remote access to digital services and by allowing rural SMEs to work and conduct business through digital platforms
10. the enablement of **5G** mobile networks and associated Use Cases to accelerate its deployment to lead the way rather than historically being a follower
11. **smart cities/homes infrastructure** offering reductions in energy use, congestion and fuel costs stemming from smart management, smart energy and smart travel systems

⁸ Ofcom, The Benefits of Ultrafast Broadband Feb 2018

⁹ This is particularly pertinent to Covid 19 driven change with more on-line businesses and changing working practices

¹⁰ Specifically 'Cloud' based operation and services and Digital Transformation

12. increased manufacturing productivity secured from the emerging digital revolution in manufacturing (**Industry 4.0**) and connected **Internet of Things (IoT)**

Advanced Digital Infrastructure also enables many other social benefits, such as;

13. **healthcare benefits** through advances in connected health technologies

14. **environmental impacts** through carbon reduction, travel reduction, home working etc.

15. **social inclusion** and removal of any Digital Divide

1.3 Connected Places

1.3.1 Spending Objectives

It is the overarching investment objective of the Swansea Bay City Region Deal to ensure that the regions cities, towns and development zones have access to world class infrastructure to deliver economic growth and attract inward investment. As stated in section 1.2 this will deliver the following SMART spending objectives

Objective	Benefit
<p>Improve quality of public service delivery</p>	<ul style="list-style-type: none"> • Facilitate SMART cities e.g. enhanced transport management, waste disposal, environmental monitoring etc • Improved efficiency of public sector in areas such as health, social care and education
<p>Cost savings</p>	<ul style="list-style-type: none"> • Reduced operational costs in public service delivery • Savings in on-going revenue costs for digital services
<p>Stimulation of competition and choice</p>	<ul style="list-style-type: none"> • Enhanced availability of services to local businesses and residents • Price and service level competition
<p>Inward investment</p>	<ul style="list-style-type: none"> • Telecoms investment in fixed and mobile infrastructure
<p>Economic benefits</p>	<ul style="list-style-type: none"> • Employment growth • Start ups • Productivity improvements

Table 6 – Connected Places Spending Objectives

1.3.2 Existing Arrangements

The cities and development zones in the region have a very low penetration of full fibre to the premise. Table 1 shows the 2020 Ofcom Spring data¹¹ that reveals the penetration of full fibre¹² in the region.

Authority	Percentage Premises Served
Carmarthenshire	16.7%
Neath Port Talbot	2.6%
Pembrokeshire	5.2%
Swansea	18.5%

Table 7 - Full Fibre Availability (UK 10%)

In contrast the City of London has 32.7% availability of Full Fibre. Internationally the comparisons are starker with Japan 97%, Sweden 44% and a total EU average of 14%. In fact, the situation has improved markedly in the past year in Swansea where BT announced a programme of investment in the key commercial centres, and In Carmarthenshire where BT is investing in Carmarthen and Cross Hands. However, Neath Port Talbot and Pembrokeshire remain poorly served. Similarly, alternative network operators are prioritising other centres in the UK. The Swansea Bay City Deal must therefore have an objective to address this challenge.

Ultra-Fast¹³ Broadband shows a better penetration (notably in Virgin Media areas), but in some parts still extremely low penetration for the region.

Authority	Percentage Premises Served
Carmarthenshire	16.2%
Neath Port Talbot	59.2%
Pembrokeshire	5.2%
Swansea	73.2%

Table 8 - Ultra-Fast Broadband Availability (UK 53%)

¹¹<https://app.powerbi.com/view?r=eyJrljoiZTg4NDMyZjctNWJhZS00MjNjLWlxYzMtZjkwYzljNDk2NzdmliwidCI6IjBhZjY0OGRILTMxMGMtNDA2OC04YWU0LWY5NDE4YmFIMjRjYyIsImMiOjh9>

¹² Able to deliver Gigabit speeds

¹³ Identified as download speeds above 300Mbps being available

In order to improve the position and unlock the benefits available to business and homes, the objectives for Connected Places will focus on the provision of new duct and dark fibre (or equivalent) infrastructure which will need to be built in key development corridors and zones to underpin strategic aims. For state aid reasons SBCD can only invest in connecting public sector assets but experience elsewhere has shown that such investment anchors pump primes additional commercial investment into business parks, commercial centres and residential premises. Indeed, other cities have experienced a multiplier of 6:1 between commercial and public sector investment¹⁴. For example, in Aberdeen an initial £6m anchor tenancy project by Aberdeen City Council leveraged a further £40m of investment by City Fibre and Vodafone¹⁵.

The key areas for investment are;

- Llanelli/Central Swansea/Neath Port Talbot; This is a contiguous area where a number of the SBCD and private sector initiatives are located. This infrastructure will help to facilitate a world class marine energy hub and support existing and emerging industries including those in media, digital, life sciences and engineering.
- Pembroke and Milford Haven: The location of Pembroke Dock Marine will create a world class marine engineering fabrication, test and deployment hub.
- It should be noted that Carmarthen and Cross Hands were also identified as areas for full fibre investment, but BT has now announced full fibre investment programmes in these areas.

¹⁴ Example city from primary research, Aberdeen

¹⁵ <https://investaberdeen.co.uk/index.cfm?topNav=success-stories&subNav=case-studies&subsubNav=cityfibre-building-aberdeen%E2%80%99s-full-fibre-future>

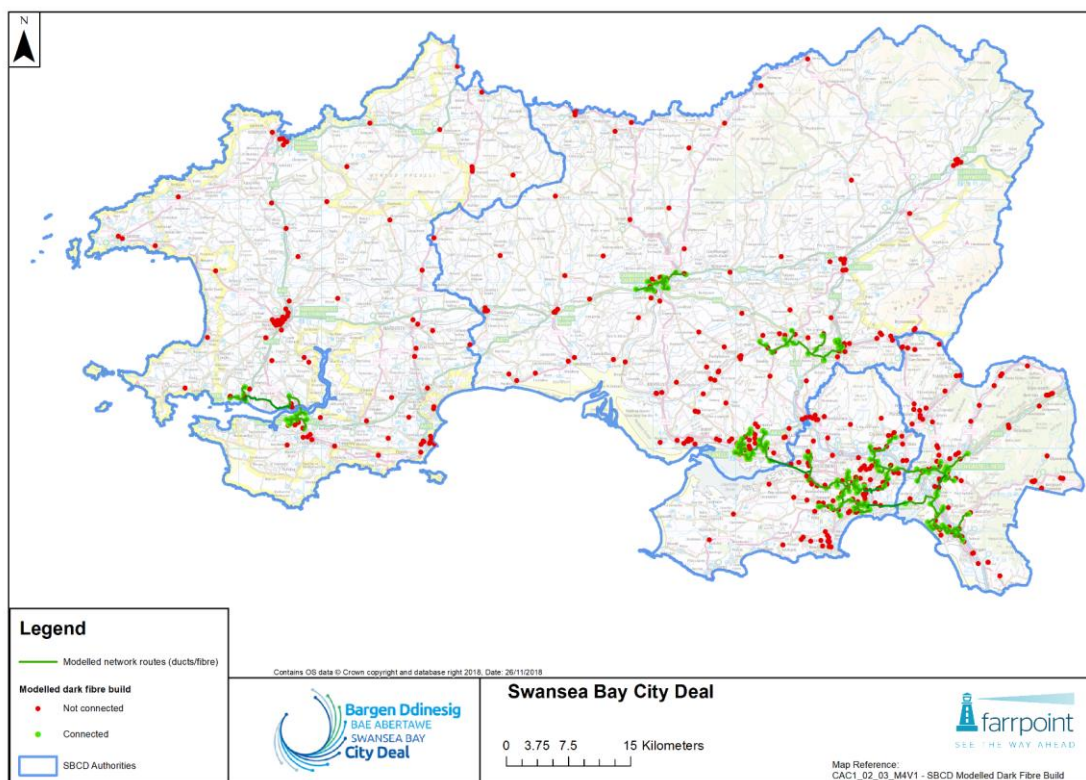


Figure 1 - Scenarios for the deployment of fibre and duct infrastructure into the Connected Places of the region

The full fibre build across the connected places/ development zones may be addressed in a number of ways and different approaches are required in different parts of the region to reflect the geographical and demographic diversity of the region as follows:

- In Swansea/Neath Port Talbot and Llanelli a blend of public sector duct usage, PIA and new commercial build will be delivered to complement and enhance the existing commercial appetite for investment. This should build on the duct programmes already commencing in Swansea, notably on Kingsway and Oystermouth Rod. This will be explored during market testing and procurement. In some parts of the region there is an appetite to invest in public sector infrastructure whilst in others, commercially owned infrastructure is favoured. This is discussed in the commercial case.
- In areas such as Milford Haven and Pembroke Dock a duct build programme will be required to enhance transport and energy sectors. The City Deal will aim to facilitate infrastructure across the region and beyond by enabling enhanced regional and international connectivity. In reality, the SBCD deal initiatives are key to enabling commercial industry and the Welsh Government to achieve many of their proposed digital programmes.

The public sector will also be a key beneficiary of the connectivity provided and as such will gain through the accelerated and improved digital transformation of their services, offering efficiency and cost saving improvements.

The UK Government Future Telecoms Infrastructure Review¹⁶, (FTIR), sets out the UK position on enhancing connectivity, including fibre to the premise and 4G/5G. In addition, the UK Government Department for Digital Culture Media and Sports funding for Local Full Fibre Networks programme is entirely based on achieving wider access to fibre based services. Connected Places is therefore directly aligned to current UK and Welsh Government interventions and to their wider policies.

Currently BT Openreach is the dominant provider of telecommunication infrastructure across the region, although Virgin Media also has a significant presence in Swansea and Neath Port Talbot. Other alternative carriers in the UK such as City Fibre, Talk Talk and Vodafone have yet to announce any investment in the region.

The services provided by the PSBA, a Welsh government organisation providing broadband services within the public sector, uses connectivity provided primarily by BT Openreach. Within the region, the provision of fibre connectivity will need to integrate with PSBA responsibilities, potentially integrating their current role and business model with SBCD interventions.

In addition, the west coast of Wales is a termination point for the proposed Greenlink power (and potentially fibre) link from Ireland¹⁷. This could also link with the proposed Welsh Govt Trunk Road Fibre network. It is essential these projects are interlinked by the fibre connectivity that is envisaged under this SBCD programme. The programmes are complementary and interdependent. Feedback from both the telecommunications industry as well as other key sectors (e.g. media and digital content) looking to invest in South Wales has stated that they require diverse routing¹⁸ across South Wales to Ireland and beyond. Examples of companies who have stated this include major international telecommunications companies such as Zayo and media organisations.

Supporting and coordinating these initiatives would give the Swansea Bay City Region and Wales a large capacity diverse route in the form of a loop taking in Dublin and linking across via another undersea cable to Liverpool and Manchester. If a fibre route such as this was constructed it would immediately put Swansea and the region on a par with Manchester in terms of digital access, opening opportunities that are currently out of reach for data centres and cloud services, as well as inward investment from media and content providers.

¹⁶https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732496/Future_Telecoms_Infrastructure_Review.pdf

¹⁷ <https://www.greenlinkinterconnector.eu/>

¹⁸ This is a business requirement for the UK broadcasters on a security and availability issue. Comments from BBC and S4C have been made directly to this point.

1.3.3 Business Needs

Intervention is required by SBCD in order to deliver the current and future digital requirements of the cities and development areas of the region. It is imperative to facilitate a digital economy in the region and ensure that the region has an infrastructure that prepares and future proofs the area for future social, economic, and commercial change. Without such an intervention the SMART objectives will not be met, notably;

- The ability to deliver cost effective, wide ranging public services at a lower cost will be constrained.
- The local economy will not have access to the digital infrastructure it requires to deliver the economic growth and benefits identified.

Experience has shown that market forces alone will not deliver the desired digital infrastructure footprint and action is required by the SBCD to anchor investment and act as a catalyst for further investment. This is because;

- Telecommunications industry is resource constrained (both capital and operational resources) and will prioritise areas of the country that are the most commercially attractive and can be delivered at greatest efficiency. It is faced with a wide range of opportunities and will prioritise investments based on the parts of the country that have been proactive in the stimulation of digital investment (e.g. York, Milton Keynes, Aberdeen)
- Market forces are likely to lead to significant gaps in service provision – even within Cities and development zones and there is a risk that commercial investment would be focussed solely on central Swansea rather than the development areas across the region as a whole.

1.3.4 Scope and Service Requirements

Several options present themselves for consideration in developing wider full fibre connectivity across the region;

Investment in infrastructure, such as underground ducts to carry fibre optic cables

The investment is the building of ducts that would be made available on an open-access basis to allow companies to place their own fibre cables through them. The action would effectively create an asset for the city deal from which it could expect a return from companies renting space in the ducts. The leverage effect is to make it cheaper and less capital intensive for the building of Gigabit fibre networks. The investment is long term in that the infrastructure would be expected to last for at least twenty years.

Investment in fibre connectivity, (which would include ducts)

In addition to simply constructing passive infrastructure for telecoms companies to use, it is also possible to deploy fibre at the same time and then to make this connectivity available to others, either as dark fibre which they can light and use for their own purposes or as managed fibre that is ready to use for connecting different locations. The leverage effect is the same as for ducts. Fibre optic cables have a life of at least ten years, but in reality, their useful life may run to at least twenty years.

Investment through managed services such as from the PSBA

Organisations with existing fibre assets can be partnered with in order to encourage them to upgrade their existing infrastructure. Such investments are often to extend the coverage to new locations or to improve the capacity of their existing infrastructure by updating the active equipment in exchanges and points of presence. Building on existing digital assets is often a way to reduce timescales and accelerate the uptake of digital services.

The blend of the above approaches will be required across the region. This will be a function of:

- Whether the authorities have existing ducting that they wish to expand and open to the market
- Authorities appetite for owning assets versus procuring services over commercial owned infrastructure
- State aid constraints
- Commercial industry appetite to invest in any given part of the region
- The role of the PSBA and its proposed service portfolio and tariffs

These issues are discussed in detail in the Commercial Case

It is critical to apply the business needs across the region and not focus only on dense urban locations found in Swansea. Digital connectivity offers the opportunity to leverage and distribute work across a wide geographic area rather than concentrate it in urban locations.

1.3.5 Benefits

In the Urban /Economic Development Zones segment a report by the economics consultancy Regeneris¹⁹ has assessed the direct and indirect economic impacts of full fibre infrastructure over 100 UK cities. Specifically, in the Swansea Bay City region, the modelled impacts of the direct benefits are >£200m against a projected investment for the region of £17m, a multiplier of 11. In fact, Swansea City itself has a multiplier of 20. These benefits are broken down as follows;

¹⁹ Regeneris report on the Economic impact of Full Fibre

<https://www.cityfibre.com/wp-content/uploads/2018/03/The-Economic-Impact-of-Full-Fibre-Infrastructure-in-100-UK-Towns-and-Cities-12.03.18.pdf>

- Productivity improvements to businesses - 8%
- Start-ups – 9%
- Innovation - 8%
- Network build – 19%
- Enhanced teleworking and worker flexibility – 11%
- Household benefits – 45%

This assumes a build up as follows;

- services enabled: 1 year after the start of network build
- 35% adoption rate reached: after 5 years
- productivity benefits achieved: 1 year after adoption
- innovation benefits realised: 4 years after adoption.

The range of benefits that can be achieved are laid out in section 1.2, with the understanding that both private and public sector bodies can achieve multiple benefits through enhanced connectivity. However, the benefits available and then secured are dependent on many factors, such as the sector in which the organisation operates and the skills and knowledge they have around digital innovation and application. A general overview of benefits are;

Benefit Outline	Connected Places
Productivity improvements	Digital Transformation enabler
Innovate new business models and open new markets	Digital Transformation enabler
New business start-ups	Innovation in digital services
Network Building & Support Employment	Civil engineering and Technical Skills
Skills Development	Demand for digital skills increased
New Working Practices	Collaborative and distributed working
Teleworking to Stimulate Rural Business Models	
Private Household Benefits	Attraction to area
Sustaining Communities	
Enablement of 5G	Access to fibre
Smart Cities/Homes Infrastructure	Enablement of IoT services
Industry 4.0	Enablement of IoT services

Healthcare Benefits	Innovation in services delivered digitally
Positive Environmental Impacts	Reduced need to travel
Social Inclusion and Removal of any Digital Divide	

Table 9 - Benefits for Connected Places

1.3.6 Risks, Constraints and Dependencies

The constraints for Digital Infrastructure intervention in the Connected Places workstream are shaped by:

- SBCD governance procedures.
- Stakeholder co-ordination and participation in any proposed intervention. In particular the authorities (and potentially other public sector bodies in the region) will need to use and anchor any infrastructure deployed. This will have implications for delivery of ICT and other services
- State aid that limits the ability of the public sector to invest directly into commercial opportunities in the sector without access to state aid clearance or the establishment of commercial ventures
- Supplier appetite to invest in the region
- Available funds which may require intervention scale prioritisation by SBCD leadership
- PSBA policies for the delivery of services over dark fibre infrastructure
- Resources and skills necessary to lead and manage the interventions.

In terms of the dependencies, these are more aligned to co-investment opportunities. A range of national and rural telecommunication interventions will need to be complementary and aligned to SBCD actions. Aligning interventions to take account of other funding sources would be efficient and allow wider scale impacts to be achieved, rather than acting alone and possibly duplicating other interventions.

In addition the SBCD Digital Infrastructure project is a cross cutting project that will provide the underlying infrastructure for many of the other SBCD programmes and initiatives to be delivered. There is a risk that many of the other SBCD projects may be sub-optimal if they are not able to access the infrastructure envisaged here. Innovation, competitiveness and employment opportunities would be risked.

Potential Risks are outlined in table below

Risk	Mitigation
Resources constraints	SBCD will require a dedicated Digital team to manage the range of interventions envisioned. This will include funding applications, procurements, stakeholder liaison, supplier engagement and interaction with external national and regional schemes
State aid challenges	Clearly defined legal and regulatory guidance required to frame selected options and activities
Integration with other interventions is challenging on timescales and governance	Be clear on the actions that City Deal are undertaking to clearly identify boundaries and overlaps. Work with other interventions to frame areas of joint interest and where joint action is called for
Other sources of funding become available to integrate into the City Deal funding for specific objectives and to leverage outcomes	Ensure the business case is able to adapt to external changes in overall funding scope and availability
Other interventions overlap with the City Deal, with early investment by SBCD possibly losing other funding to the region	Work with other interventions to frame areas of joint interest and where joint action is not called for
Intervention timescales under Digital Infrastructure exceed five years due to governance or management issues	Prioritise actions within the Commercial and Management case to ensure benefits are delivered
There is a risk that operators may be selective in their deployment within the region. Supplier appetite is not stimulated	The telecommunications industry has finite capacity and multiple opportunities. Potential participants should be encouraged to consider the opportunity, particularly the lowering of their risk

Digital Infrastructure is delivered in a fragmented way, lessening the impact and leverage that could be achieved	Make the interdependencies between the intervention types clear and include these within the critical success factors
Sourcing from service aggregators or suppliers such as the PSBA may prove commercially challenging	Ensure that stakeholders and the PSBA are clear on the rationale and objectives to allow the greatest level of involvement

Table 10 – Connected Places Risk Register

1.4 Rural

1.4.1 Spending Objectives

It is the overarching investment objective of the Digital Infrastructure project to ensure widespread equality of access to broadband services across the region (notably in rural areas) to deliver social cohesion, efficient delivery of public services and economic growth.

Objective	Benefit
Improve quality of public service delivery	<ul style="list-style-type: none"> • Improved access to public services in remote areas such as health, social care and education • Ensure rural schools, community centres, libraries etc have access to the same quality of information and digital services
Social cohesion and sustain communities	<ul style="list-style-type: none"> • Reduce population decline • Facilitate community services
Economic benefits	<ul style="list-style-type: none"> • Employment growth • Facilitate teleworking

Table 11 - Rural Spending Objectives

1.4.2 Existing Arrangements

Rural communities in the region have long suffered from poor internet connectivity. Ofcom's Spring 2020 data showing the % of properties able to receive superfast services (defined as >30Mbps) in the table below.

Superfast Broadband Availability	
Authority	Percentage Premises Served
Carmarthenshire	86.2%
Neath Port Talbot	97.6%
Pembrokeshire	87.2%
Swansea	97.6%

Table 12 - Superfast Availability

The Ofcom data also shows those **unable** to receive minimal internet connectivity.

NOT able to receive 2Mbps	
Authority	Percentage Premises
Carmarthenshire	2.0%
Neath Port Talbot	0.1%
Pembrokeshire	1.6%
Swansea	0.1%

Table 13 - Premises < 2Mbps Percentage

NOT able to receive 5Mbps	
Authority	Percentage Premises
Carmarthenshire	4.5%
Neath Port Talbot	0.2%
Pembrokeshire	4.0%
Swansea	0.2%

Table 14 - Below 5Mbps Percentage

NOT able to receive 10Mbps – Universal Service Threshold	
Authority	Percentage Premises
Carmarthenshire	7.1%
Neath Port Talbot	0.3%
Pembrokeshire	6.8%
Swansea	0.5%

Table 15 – USO Percentages Spring 2020

In all cases there is a distinct variation across the region showing a level of market failure due to the cost of delivering services to areas that are more rural in their makeup.

As part of the Welsh Government Superfast Cymru programme Open Market Review, dialogue with industry was undertaken to establish if a premise was able to receive a 30Mbps download service currently, or whether it will be delivered over the next three years under the programme. The results revealed a significant gap in service provision of 20,548 premises across the region, as shown in the table below;

Authority	White Premise ²⁰
Carmarthenshire	9,480
Neath Port Talbot	1,650
Pembrokeshire	6,366
Swansea	3,052

Table 16 - White Premises Totals

The Ofcom Spring 2020 data set also provides statistics on actual premises by broadband speed. In particular it identifies the number of premises in the region that are currently beneath the envisaged minimum Universal Service Obligation of a 10Mbps download speed. These are as follows:

²⁰ The EU term 'White Premises' indicates unable to receive NGA broadband < 30Mbps

Authority	Premises below USO
Carmarthenshire	6,170
Neath Port Talbot	223
Pembrokeshire	4,079
Swansea	602

Table 17 - Premises Numbers beneath Universal Service Threshold of 10Mbps

In total there are 11,074 sites – largely concentrated in the rural areas of Carmarthenshire and Pembrokeshire that are below the UK governments stated USO.

The Welsh Governments Superfast Cymru programme was put in place to address this market failure, whereby the costs of delivering superfast broadband to challenging locations in some rural and urban locations meant they had lagged behind significantly. It does need to be noted that the figures above are post Pre-Superfast Cymru 2 but funding constraints and the ability of suppliers to address easier to reach low cost sites means that the SBCD region will still have significant gaps in coverage. The Welsh Government has collated the impact of the programme along with other initiatives such as LFFN and voucher schemes and there will remain approx. 20,500 white premises to be addressed in the region.

A detailed mapping exercise has been undertaken of the location of these white premises with poor digital connectivity. This is shown in the following maps for each authority area that shows the concentration of sites not able to receive a 30Mbps broadband service. In areas shaded red there is a greater concentration of poorly served premises. Although there are challenges across the region there are particular issues in the following areas:

- Swansea; Gower, Forestfach, Pontarddulais
- Neath Port Talbot; Kenfig, Bryn-Coch, Vale of Neath
- Carmarthenshire; Widespread across County
- Pembrokeshire; Widespread except Haverfordwest and A40 corridor.

All of these areas are therefore disadvantaged across the broad range of benefits being sought by the City Deal, in some cases to the point where they will not be able to participate in any of them.

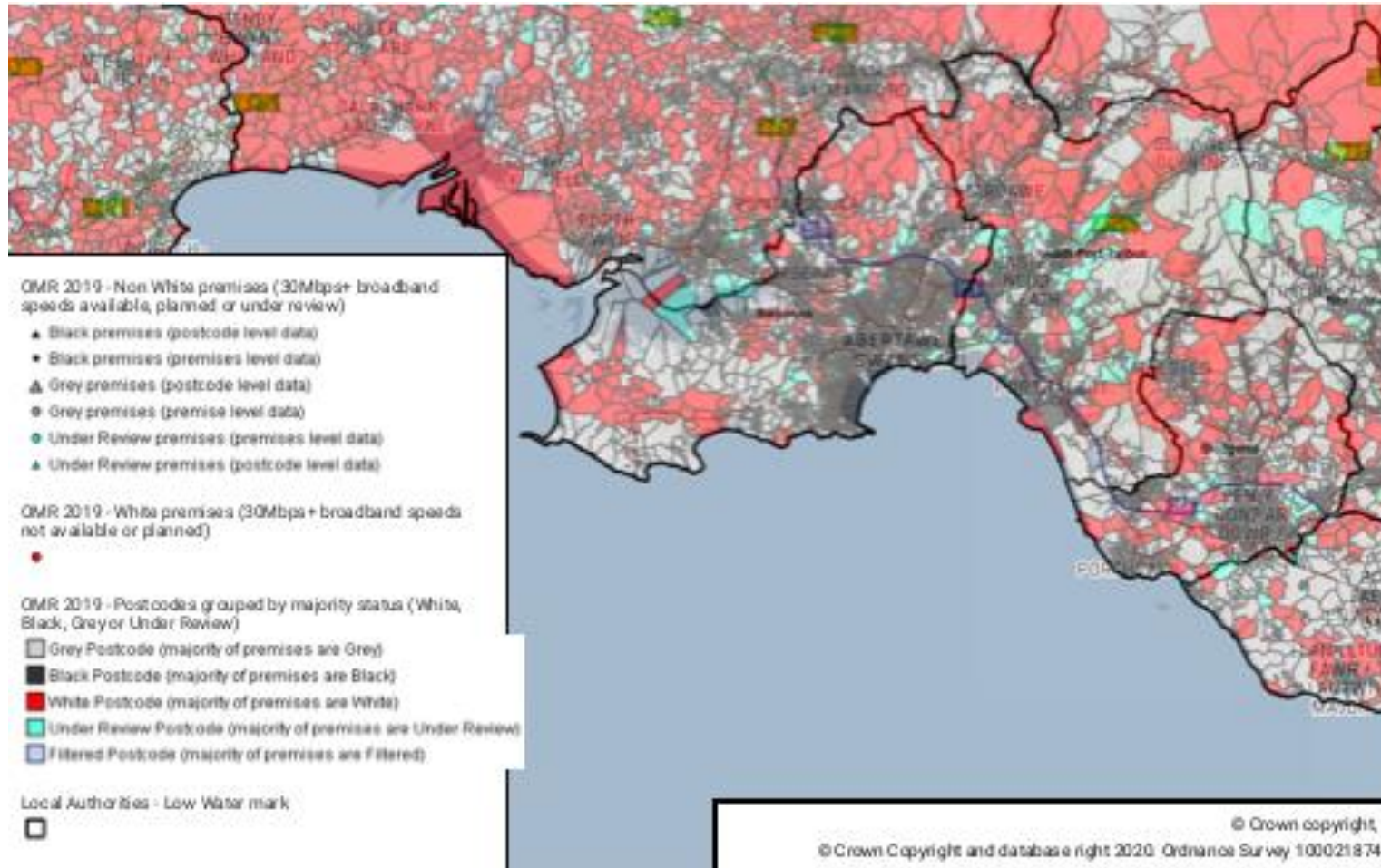


Figure 2 - Swansea & Neath Port Talbot OMR

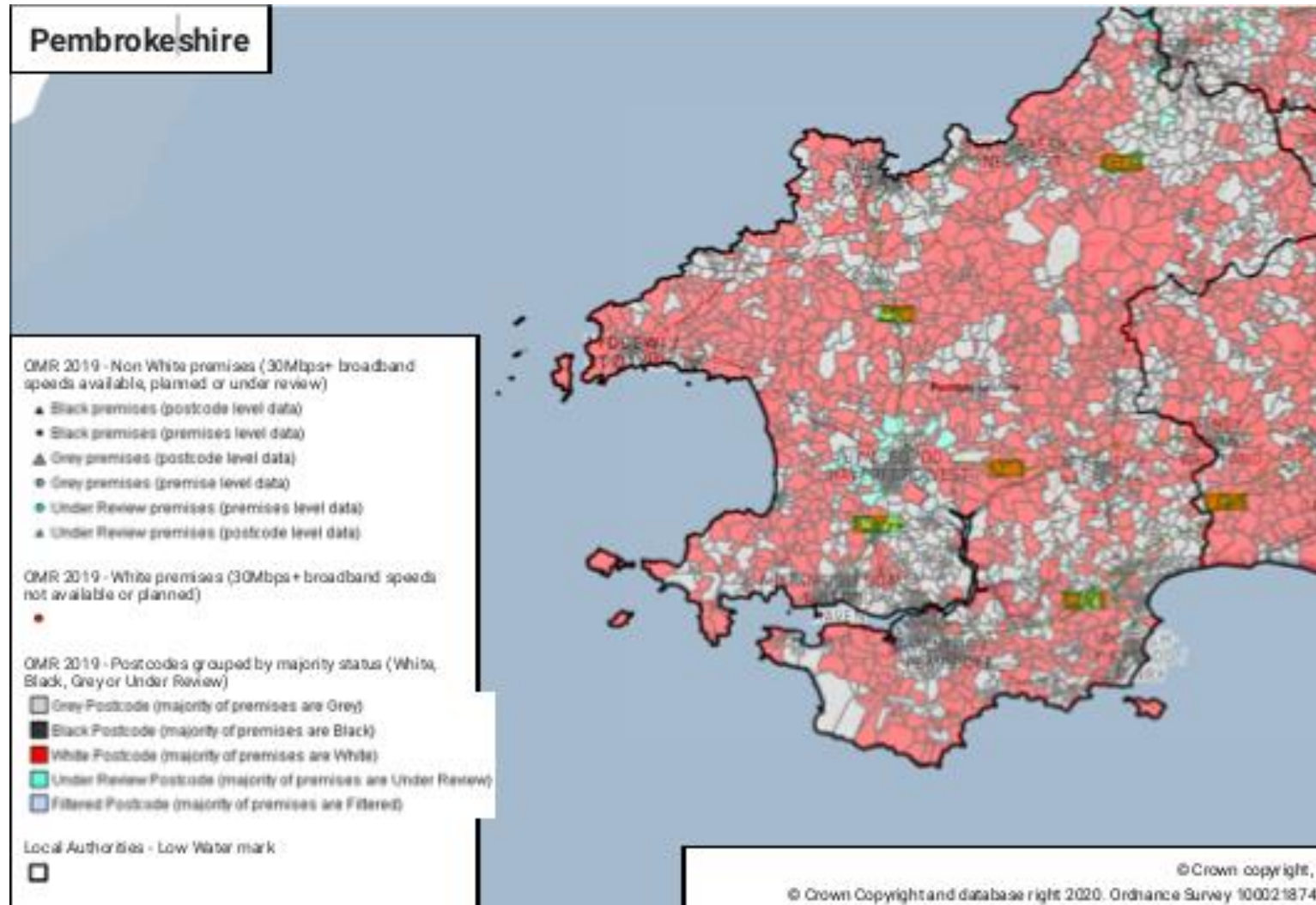


Figure 3 - Pembrokeshire OMR

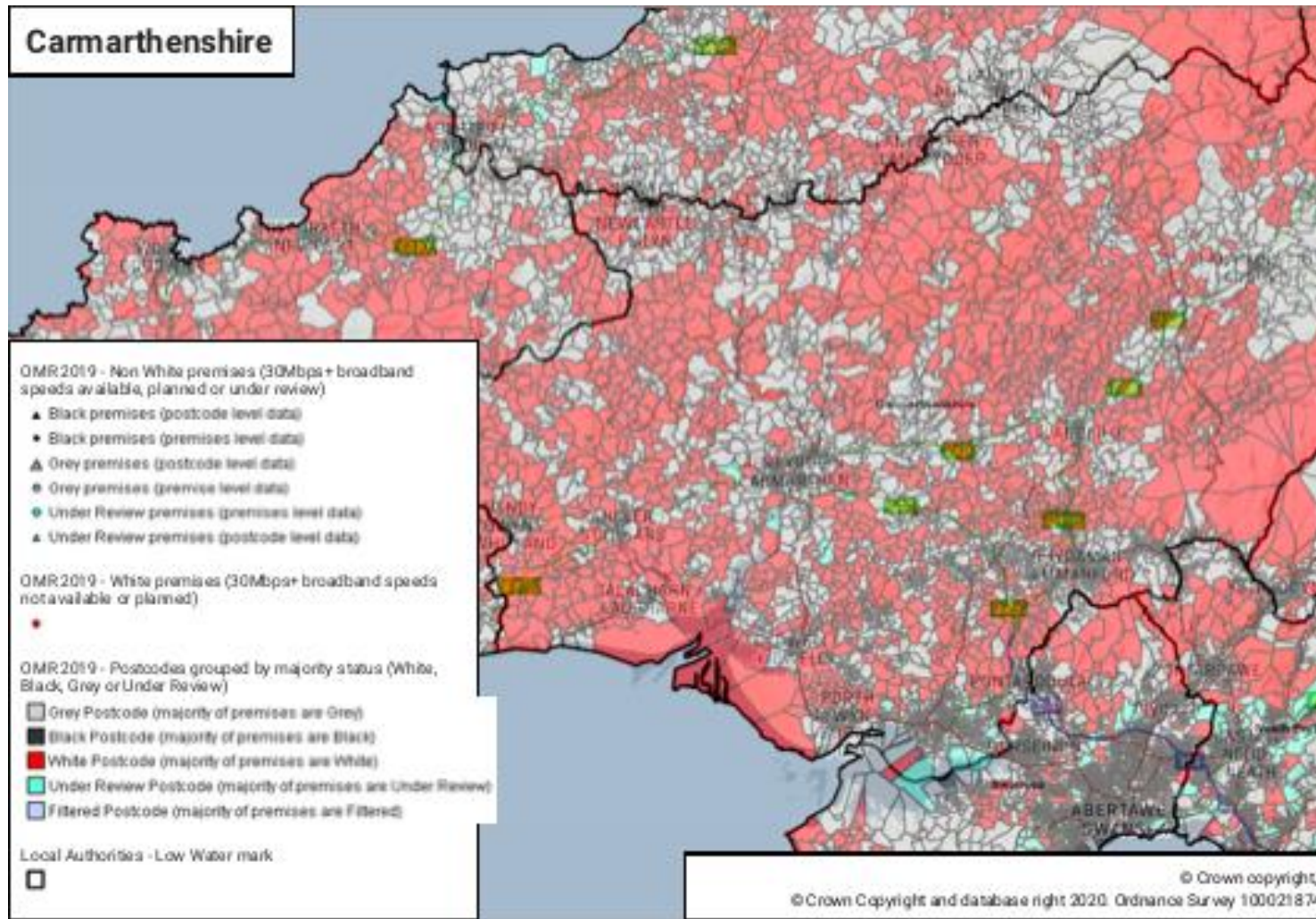


Figure 4 - Carmarthenshire OMR

1.4.3 Business Needs

The challenge of bridging the rural gap is recognised by both the UK and Welsh Government and a range of initiatives are either planned or in place including;

- Currently in operation, Access Broadband Cymru (ABC) scheme; A De Minimis grant of £400 or £800 towards the installation costs of a better broadband connection.
- DCMS Local Full Fibre Network Fund (LFFN Waves 2 & 3) funded investment into public sector sites in rural areas: Pembrokeshire was successful in applying for LFFN funding. Under this programme 53 public sector sites are being upgraded from copper to Full Fibre using Openreach FFIB infrastructure. At the time of writing it is hoped that this scheme may be extended across the region.
- The Welsh Govt is considering setting up a national Dynamic Purchasing Scheme to enable local additional investment to Superfast Cymru.
- A Universal Service Obligation (USO) for broadband was launched in March 2020. Regulated by Ofcom, everyone has a legal right to request a broadband connection of at least 10 Mbps although users have to cover costs if they exceed £3400, which will often be the case in rural Swansea Bay Region. Further details are available at:

<https://www.ofcom.org.uk/phones-telecoms-and-internet/advice-for-consumers/broadband-uso-need-to-know>

- DCMS Rural Gigabit Connectivity Fund. This scheme provides funding to connect rural hubs in a village or market town with a fibre connection. This must be a public sector site such as GP, health centre, library or school. Full details are provided at

<https://www.gov.uk/government/publications/rgc-programme-key-information>

- The Rural Gigabit Voucher scheme is a UK wide subsidy scheme aimed at groups of individuals or businesses based in rural areas. The scheme offers funding towards the cost of installing gigabit capable broadband to residential and business premises and who currently have broadband speeds less than 100 Mbps. (<https://gigabitvoucher.culture.gov.uk>). Residential properties can receive a connection voucher for up to £1500 and SMEs £3500.
- Autumn 2019 Boris Johnson announced a target of 2025 for all premises to receive “gigabit capable” broadband connectivity. Up to £5billion has been allocated nationally to achieve this goal which is targeted at the final 20% of premises across the UK i.e. the 20% worst served premises. At the time of writing it remains unclear how this will be implemented and the cross impact on existing schemes.

The net impact of these schemes is likely to reduce the scale of the problem facing the SBCD region in its goal of quality broadband service access.

All of these initiatives have lower take-up than has been achieved in other parts of the UK, indicating that the demand-stimulation actions undertaken so far require attention.

A feature of all of the above schemes is that they are national in focus and often lack the local knowledge, resources and presence to address regional requirements. It is this role that the SBCD can address. There will continue to be gaps in coverage across the region and this needs to be addressed by a locally driven programmes that are complementary to national schemes.

1.4.4 Scope and Service Requirements

Although there are a range of regional and national initiatives to improve rural access to digital services it is clear that gaps in service, take up and availability will remain across the region. SBCD propose a range of intervention measures to complement current and future national and regional schemes to address these gaps. These will include;

- A programme of demand stimulation activities to increase awareness in communities and drive service adoption
- A regionally led procurement of broadband infrastructure in those areas not served by the commercial sector and other national and regional interventions. This should seek to deliver a minimum of 30Mbps download speeds to as many commercial and residential premises as possible
- Supplier side engagement to raise awareness of gaps in service provision and encourage investment through the removal of barriers such as planning
- Engagement and funding applications to central and regional government to ensure the region is targeted for funding.

1.4.5 Benefits

A direct comparator in this case is the work undertaken by Ofcom to determine the business case for the introduction of a Universal Service Obligation²¹ so that every premise in the UK has connectivity at 10Mbps or above. This directly compares with the rural areas of the region. In their economic assessment, a benefit multiplier of 3.4-3.6:1 is set out. Independent research²² for BT undertaken to assess the impact of investment in rural connectivity for Northern Ireland gave the following;

²¹ <https://www.ofcom.org.uk/phones-telecoms-and-internet/advice-for-consumers/broadband-uso-need-to-know>

A limit of £3,400 has been placed on any single connection, if the cost of connectivity is in excess of this, then a contribution will be required. It is also limited to customers who will NOT benefit from another publicly funded programme.

²² The analysis was the delivery of 30Mbps services across rural areas in NI, DotEcon report for BT

Benefit Category	Absolute Benefit	Benefit Multiple
Productivity Growth	£50m - £410	0.3 – 2.7
Employment Benefits	£290m - £890m	1.9 – 5.9
Teleworking	£40m	0.3

Table 18 - Rural Connectivity Investment Impacts in NI (Source BT)

In effect this gives a range of benefit multipliers of between 2.5 and 8.9. However, as the economic impact undertaken for the USO is very recent and is more conservative, the 3.5:1 figure is preferred for rural Digital Infrastructure.

Benefit Outline	Rural Connectivity
Productivity improvements	Digital Transformation enabler
Innovate new business models and open new markets	Digital Transformation enabler
New business start-ups	Innovation in digital services
Network Building & Support Employment	Civil engineering and Technical Skills
Skills Development	Demand for digital skills increased
New Working Practices	Collaborative and distributed working
Teleworking to Stimulate Rural Business Models	Remote working
Private Household Benefits	Attraction to area
Sustaining Communities	Teleworking and distributed working
Enablement of 5G	Access to fibre
Smart Cities/Homes Infrastructure	
Industry 4.0	
Healthcare Benefits	Innovation in services delivered digitally
Positive Environmental Impacts	Reduced need to travel
Social Inclusion and Removal of any Digital Divide	Widespread access to advanced digital services

Table 19 - Benefits for Rural Connectivity

1.4.6 Risks, Constraints and Dependencies

The constraints for SBCD Digital Infrastructure to address the rural connectivity issue are shaped by:

- Ensuring that SCBD in-fills the connectivity gaps in the region following the national and rural interventions. This will need close alignment and monitoring between stakeholders and programmes
- State aid is a challenge and SBCD should utilise existing clearances wherever possible. It will not be timely or feasible to apply for a new state aid clearance
- Supplier appetite
- Community pressure.
- Available funds which may require intervention scale prioritisation by SBCD leadership
- Resources and skills necessary to lead and manage the interventions.

It is also very likely that in the rural dimension of Digital Infrastructure, some of the spending options to deliver infrastructure will require grant funding, with little likelihood of achieving a claw-back should the revenue generated by the infrastructure become net positive to the supplier. The options and approach will be defined in the Commercial Case.

In terms of the dependencies, these are more aligned to co-investment opportunities rather than true dependencies. As an example, the USO may offer a capped grant fund of up to £3,400 per premise. Aligning interventions to take account of such funding sources would be efficient and allow wider scale impacts to be achieved, rather than acting alone and possibly duplicating other interventions.

The primary risks associated with the Rural Programme are given in the table below;

Risk	Mitigation
Resources constraints	SBCD will require a dedicated Digital team to manage the range of interventions envisioned. This will include, funding applications, procurements, stakeholder liaison, supplier engagement and interaction with external national and regional schemes
State aid challenges	Clearly defined legal and regulatory guidance required to frame selected options and activities
Integration with other interventions is challenging on timescales and governance	Be clear on the actions that City Deal are undertaking to clearly identify boundaries and overlaps

	Work with other interventions to frame areas of joint interest and where joint action is called for
Other sources of funding become available to integrate into the City Deal funding for specific objectives and to leverage outcomes	Ensure the business case is able to adapt to external changes in overall funding scope and availability
Other interventions overlap with the City Deal, with early investment by SBCD possibly losing other funding to the region	Work with other interventions to frame areas of joint interest and where joint action is not called for
Intervention timescales under Digital Infrastructure exceed five years due to governance or management issues	Prioritise actions within the Commercial and Management case to ensure benefits are delivered
Demand side interventions are not fully harmonised with connectivity interventions	<p>Ensure project plans have clear timelines and actions that recognise the interdependency with demand side stimulation</p> <p>Extend the skills and training remit within the City Deal to encompass supporting digital transformation and innovation of use cases making use of the Digital Infrastructure</p>
Levels of skills around digital innovation and transformation within SMEs mean that take-up is low.	<p>Extend the skills and training remit within the City Deal to encompass supporting digital transformation. In particular, digital skills around the technology such as 5G, but also the way in which innovation of sector specific use cases could make use of the Digital Infrastructure being provided.</p> <p>In addition to technical skills, there will potentially be significant work within Civil Engineering areas. If this is an area of skills shortages, then support in this area should also be considered.</p>
Digital Infrastructure is delivered in a fragmented way, lessening the impact and leverage that could be achieved	Make the interdependencies between the intervention types clear and include these within the critical success factors

Table 20 - Primary Risks

1.5 Next Generation Wireless

1.5.1 Spending Objectives

5G and to some extent 4G, are widely seen and accepted as the next General-Purpose Technology (GPT). The term is used to describe something that will have a protracted aggregate impact across many economic and social structures. Often, electricity is cited as the primary example in the way that its introduction spawned so many innovations and change. To this end, 5G is the first mobile telecoms technology to receive support for both its application and deployment directly through government²³ funding.

The overarching objectives of SBCD in relation to next generation wireless technology is to ***ensure that the region is at the forefront of 5G and Internet of Things (IoT) investment and subsequent innovation.***

Objective	Benefit
Inward investment	<ul style="list-style-type: none"> • Mobile infrastructure and service providers to invest in improved coverage in region • SBCD to be an area of early investment in new technologies and services
Innovation	<ul style="list-style-type: none"> • Digital infrastructure to stimulate local businesses and innovative start ups • Use of innovation to enhance public service delivery and lower costs
Economic benefits	<ul style="list-style-type: none"> • Employment growth • Start ups • Usage of new applications and services to drive competitiveness of local economy

Table 21 - Next Generation Wireless Spending Objectives

1.5.2 Existing Arrangements

In relation to current wireless mobile coverage, it is primarily 4G that is of concern to the region. Overall, Wales has the biggest urban/rural divide for 4G coverage in the UK. Coverage is behind the UK averages with Ofcom²⁴ stating that 10% of the geographic area of Wales has no coverage. Also, only 36% of rural areas have complete 4G coverage, with 10% of A and B roads having no coverage. When compared to England, the corresponding figures are 3% in both cases.

²³ Trials and testbeds sponsored by industry and national governments are happening across the globe.

²⁴ Ofcom Connected Nations 2019 – Wales Report.

https://www.ofcom.org.uk/__data/assets/pdf_file/0016/130822/Connected-Nations-2018-Wales.pdf

The 4G coverage map in Figure 4 uses Ofcom's 2019 data updated to March 2020:

Figure 5 – 4G Coverage Map Carmarthenshire

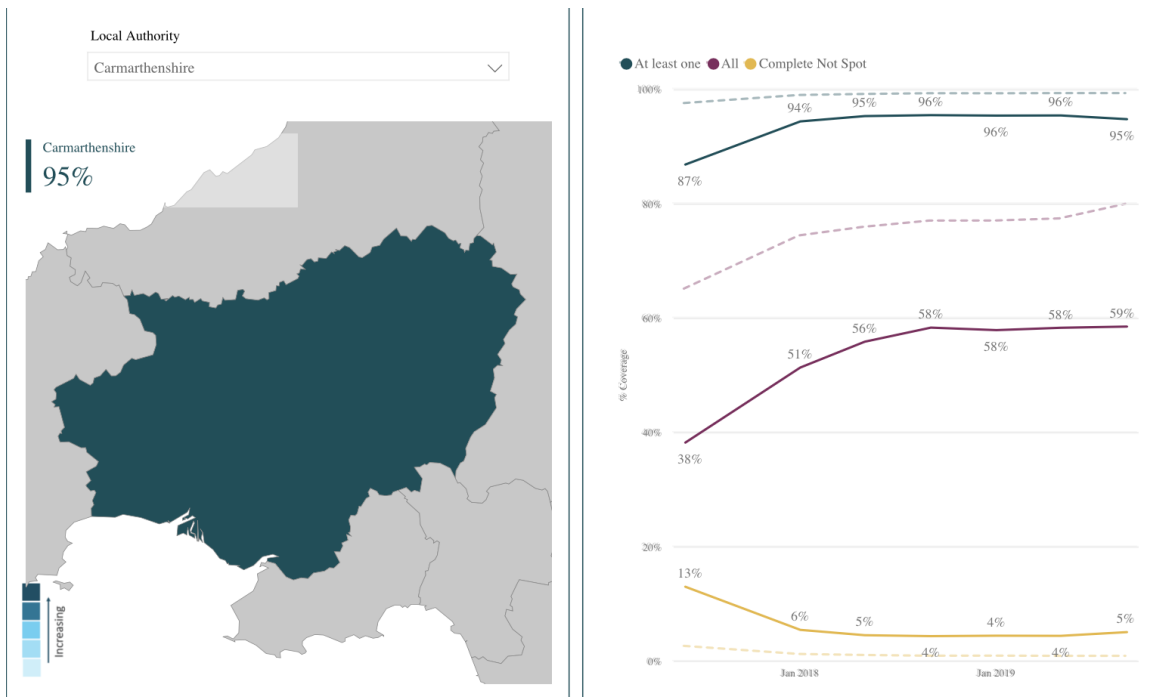
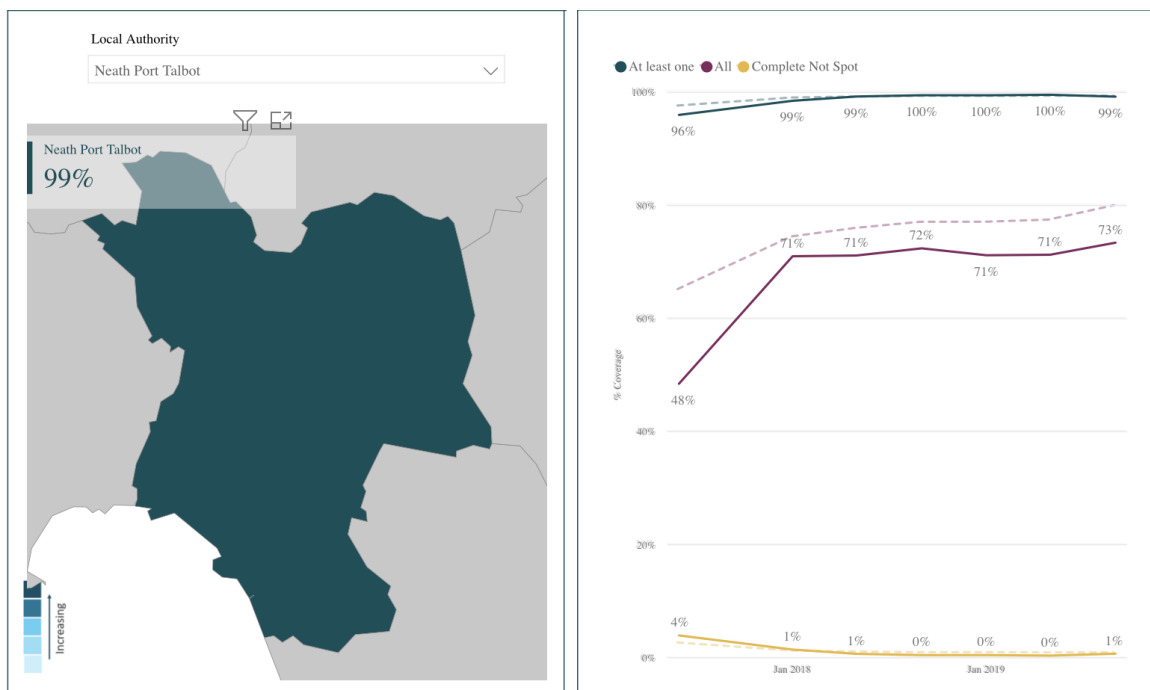


Figure 6 – 4G Coverage Map Neath Port Talbot



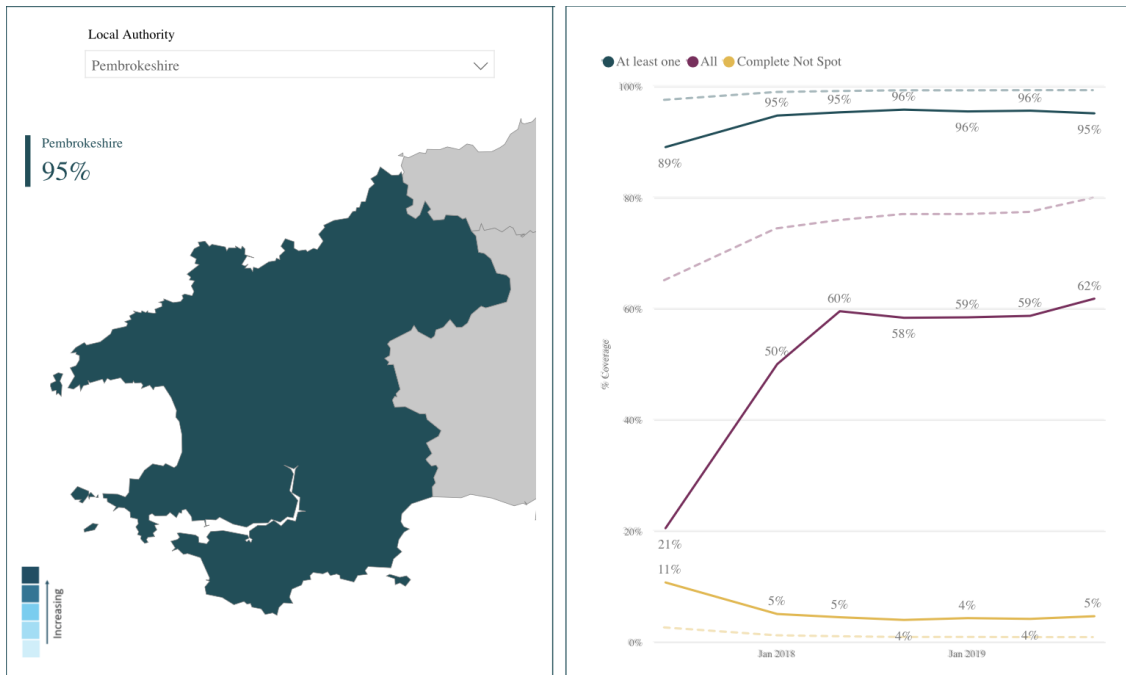


Figure 7 – 4G Coverage Map Pembrokehire

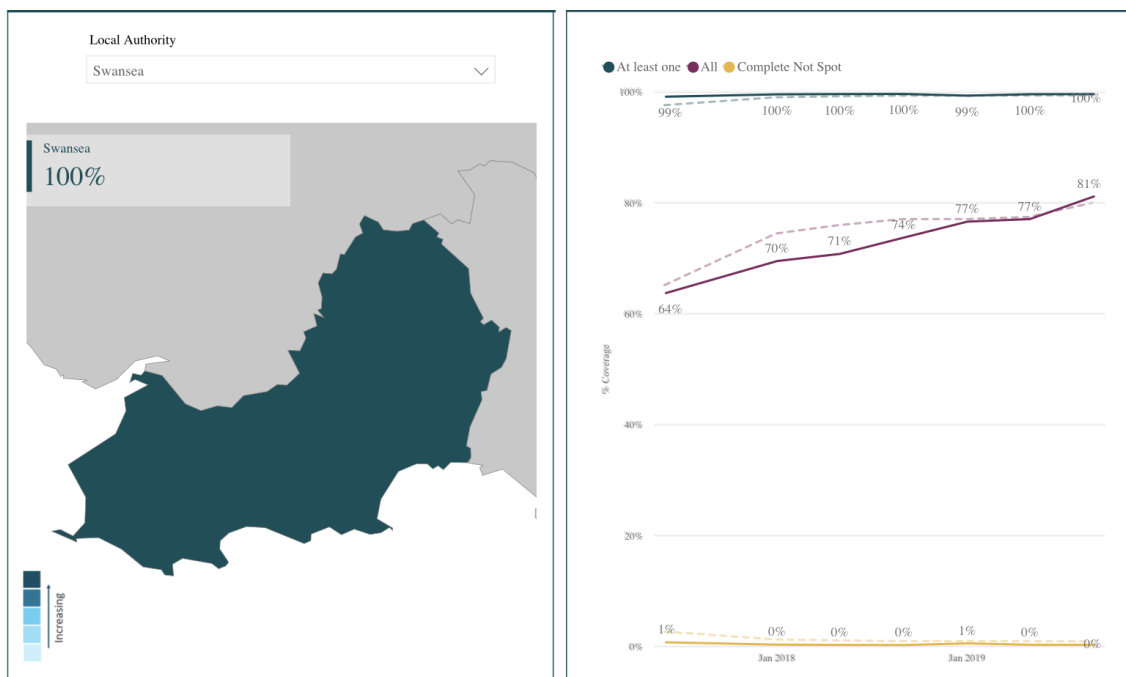


Figure 8 – 4G Coverage Map Swansea

This illustrates that there remain significant Not-Spots in 4G coverage in rural areas:

- Carmarthenshire – 8% by Geography, 11% by Indoor of Premises
- Neath Port Talbot - 7% by Geography, 4% by Indoor of Premises
- Pembrokehire - 8% by Geography, 9% by Indoor of Premises
- Swansea - 2% by Geography, 2% by Indoor of Premises

4G coverage in Wales compares poorly with England with the likes of Bristol and Brighton having 100% coverage as a comparison for Cardiff and Swansea. While more rural counties in England such as Cornwall are on a par with Swansea. Within Wales there are poorer areas with Ceredigion with 16% geographic Not-Spots, but within England nearly all counties are now 100% geographic and indoor coverage. The National picture is shown below.

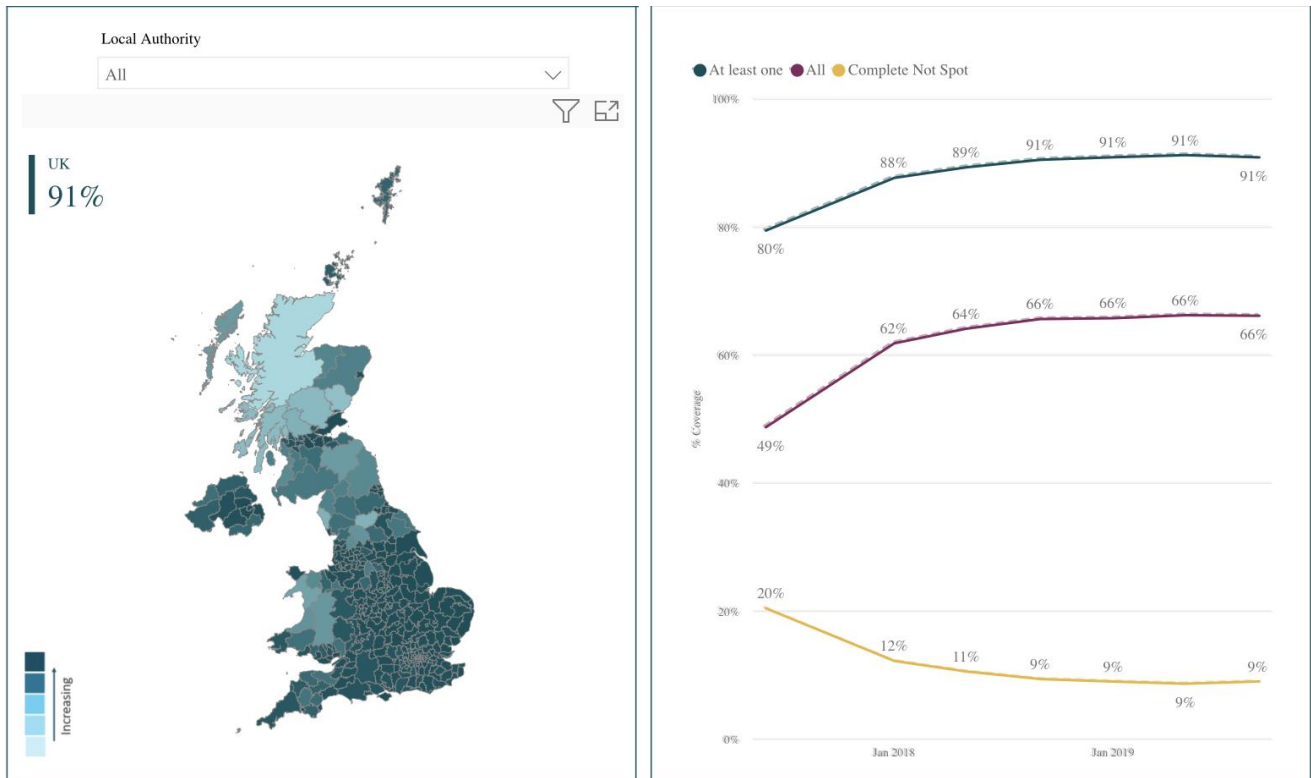


Figure 9 – Current National Coverage Perspective

Ofcom has identified several interventions to address this issue. Specifically, additional obligations for 4G coverage as part of any operator’s bids for new spectrum has been dropped in favour of the Shared Rural Network²⁵, (SRN). From the Ofcom SRN Compliance document there will be specific geographic targets set for Wales;

[MNO specific value, which is 83% for EE Limited and Hutchison 3G UK Limited, 82% for Telefónica UK Limited and Vodafone Limited] of the geographic landmass of Wales.

This leaves Wales some way behind the overall National required coverage of 88%. This disparity is likely to be in some part due to the more extensive and remote rural areas of Wales. Nevertheless, unless managed carefully this could put Wales even further behind England and Northern Ireland in terms of 4G coverage, which will also have a direct impact on 5G roll out in the coming years.

²⁵ <https://www.ofcom.org.uk/spectrum/information/cellular-coverage>

An interesting topic related to the use of satellites has emerged over the last year with broadband, remote 4G/5G base stations and even IoT being able to connect to space based services. The current crop of Low Earth Orbit (LEO) constellations are primarily targeted at bringing internet services to the underserved, particularly across the most Digitally underserved and challenging parts of the World i.e. Africa. However, these new satellite-based services will have footprints that cover the UK as well, potentially presenting opportunities to serve remote areas with broadband connectivity. The primary challenge for emerging satellite broadband providers to overcome is the inherent latency on any such service. 5G offers single digit millisecond latency, which is one of its highly desirable characteristics relevant to numerous innovative use cases. Utilising satellite connectivity will increase this latency between 10 and 100 times. For domestic and some business broadband only, this latency is potentially negligible and therefore these types of services may be appropriate. One significant factor will be the timing of service availability, which is likely to be around 2024. By this time, it is likely that further fibre and wireless broadband expansion will have reached remote rural locations making this type of service relevant to only a very niche number of customers. It is also likely to be far more expensive than current broadband prices, especially for early adopters.

The Emergency services network is a Home Office lead programme to deliver the new Emergency Services Network (ESN) critical communications system across the UK. Through the emergency services network contract, awarded to EE, there is an ongoing program of mobile network coverage expansion across Wales. Current data shows that 35 additional mobile sites have been delivered and another 37 are planned across Wales at primarily rural locations, with a total of 86 sites planned over the next two years. There is very limited 5G coverage in Wales with only Cardiff central currently benefiting. There is also a planned deployment for Swansea central this year. This is likely to increase over the next three to five years with commitments by operators to extend coverage and services to major Urban areas²⁶. The Digital Infrastructure project will target the acceleration of the roll out of 5G and IoT services ensuring the region plays a leading role in demonstrating the benefits and innovation²⁷ that next generation wireless services offer.

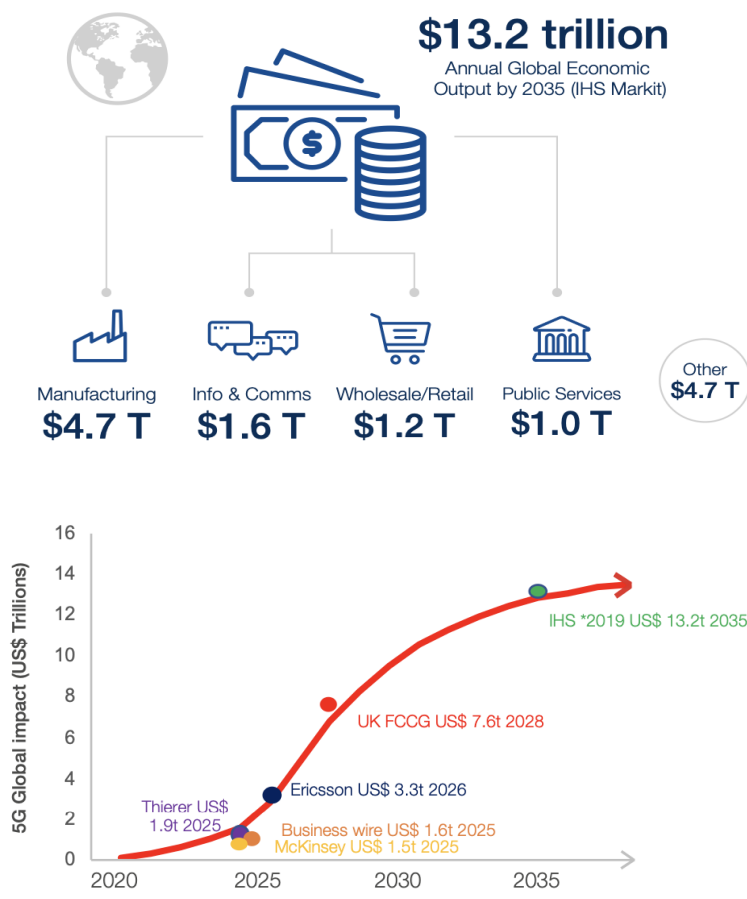
Commercial deployment of 5G in the region remains embryonic and largely focused on Swansea. In particular:

- 3 announced deployment in Swansea in February 2020
- Vodafone launched 5G services in pockets of central Swansea in summer 2020
- O2 and EE have yet to deploy 5G in the region.

²⁶ Statements by all mobile operators support this as their strategic intent. The head of BT even challenged the need for 5G in 2018

²⁷ In line with the DCMS funded 5G Urban and Rural Connected Communities initiatives

The Next generation Wireless workstream of the Digital infrastructure project primarily relates to and is concerned with 5G and IoT networks and use case, although in all 5G cases the option of utilising advanced 4G technologies may be appropriate. This option should be determined on a case by case basis. As a matter of preference, 5G should be the deployment and the service of choice to enhance the regions capability in next generation wireless services. However, where costs and speed of implementation might be paramount, the use of 4G-Adv should remain an option. As the Next Generation Wireless workstream of the Digital Infrastructure project will primarily be dealing with new and innovative services and use cases, there is currently very little evidence on which to estimate their socio/economic impact. However, many within the industry are forecasting material improvements in services and applications driven by the availability of 5G. The two charts below provide global prediction figures for 5G impact over the next 15 years²⁸.



There is a general trend of positive economic impact from 5G across all sectors with the largest impact in Manufacturing. This may not be considering the SME sector in its estimates. The chart is drawn from a number of reports and studies that show a consistent growth curve. They are heavily grossed up figures and are not necessarily applicable to the region and its sectorial ecosystem. However, they do indicate significant opportunities provided the right stimulus is given to supply and demand side.

Figure 10 - 5G Impacts Globally

The focus for the SBCD should be to use a limited number of interventions to accelerate deployment of 5G in localised areas and thereby prove the market such that further investment by the mobile operators to establish wider 5G coverage is encouraged.

²⁸ World economic Forum – Impact of 5G

By taking this approach, it will be possible to deliver evidence-based increases in productivity, innovation, skills and knowledge transfer, and in particular for the Mobile Network Operators, actual or potential revenue generation.

Due to the fact that 4G-Adv and 5G coverage will be deployed in hot-spots through normal commercial pressures, either by the operators, or as part of Digital Infrastructure interventions, drawing out widespread regional economic impacts or uplifts to GVA is very challenging and will have a high degree of uncertainty. In order to remove or mitigate that uncertainty, this business case lays out a selection of specific projects to be supported. These will act as a proof of concept against which decision about further investment by the operators, in cooperation with SBCD or directly, can be made. Key topics are:

- Enhancement of the Digital aspects of other City Deal projects, such as the Digital Clusters, Life-Science and Well-Being, Industry 4.0 and Energy
- Fixed Wireless Access for rural communities, 'Wireless fibre' for 'last-mile' distribution of digital services
- Connected vehicle demonstration along a section of trunk road
- Education related use cases, distance learning and augmented reality
- Digital transformation in industry, additive manufacturing, distributed design
- IoT demonstrator in logistics and supply chain management

In essence, each project under Next Generation Wireless will need to have a business case developed for them, with the Digital Infrastructure being provided acting as a key enabler for transformation and innovation.

The Welsh government recently completed a 5G strategy study supported by Innovation Point which is focused on Agri-Tech, Transport and Tourism. Some elements of this are likely to be of interest to SBCD.

In terms of national government supported 5G, DCMS on behalf of the UK Government, is operating several funded testbeds and trials. At this time, none are within the SBCD region. Wales did enter a bid for the DCMS lead Rural Connected Communities competition based around Tech Valleys and was successful. Planning is now complete and the grant funding about to be drawn down to enable 6 use cases to be undertaken. The model being used to provide the 5G coverage is particularly designed to allow other grant funding bodies to put in place interventions to accelerate 5G deployment. It is likely that any SBCD 5G interventions should be done in cooperation with the RCC and potentially 5G Create²⁹ programmes.

²⁹ 5G Create is the latest phase of the DCMA 5G Trials and Test bed programme. Cardiff has submitted a bid based on the creative sector that is under evaluation. The model used for the 5G coverage is the same as for RCC.

1.5.3 Business Needs

The overarching objectives of the SBCD should be to ensure that it is at the forefront of 5G and IoT investment and to accelerate deployment of coverage to match or exceed that in the UK. It is also to provide market confidence in deploying 5G widely through strong demonstrations of commercially successful use cases.

Many regions of the UK are targeting the deployment of innovative 5G use cases with a view to enhancing commercial investment in their region. A failure to do this in the SBCD area would lead to the region being given a lower priority in planned commercial deployment.

A critical need in underpinning network and service deployment is to enhance the demand and the skills in the region. The Use Cases around 5G are in their infancy and offer significant opportunity in creating new jobs and services. Innovation will be what determines the beneficial use of this technology. Interventions that involve the supply side must therefore be balanced with supporting sectors in their digital transformation journeys. In addition, skills in digital infrastructure, applications and data need to be enhanced to increase the local talent pool for potential inward investors seeking to take advantage of the enhanced digital infrastructure, including 5G.

The leveraging of all the intellectual and physical assets within the region will be an important differentiator and capturing this must be a key objective and need.

1.5.4 Scope

The core scope for the Next generation Wireless Workstream is 5G deployments. This is simply because, without intervention in Digital Infrastructure, it is very unlikely that 5G will be deployed across the region other than dense urban locations with the added danger that if this is left to supply-side market forces they may simply be MNO show cases and not generate any impact on GVA.

As part of the effort to secure 5G coverage, some of the actions taken in respect of following the guidance in the Future Telecoms Infrastructure Review will also benefit the improvement of the coverage for 4G, a supplemental goal might be added to increase 4G to at least that in England, a thorough and intense engagement with SRN would be necessary. SBCD should work closely with Ofcom and the Welsh Government to ensure that policy objectives and funding are focused on the region. With several initiatives from Ofcom and the Welsh government seeking to reinforce 4G coverage in Wales, this benefit can be driven through ensuring there is a strong, clear and open dialogue with the mobile operators around their objectives and the way in which they intend to ensure Wales keeps pace with the expansion of general 4G coverage.

1.5.5 Benefits

There is little direct evidence available as yet for the impact of better 4G coverage and almost none for 5G, (as it has not been deployed at this time in more than testbeds). Despite this, the general opinion of the industry is that 4G and 5G coverage is essential for both their general customer base and also industry and the service sector as a whole.

Work undertaken for the EU in relation to 4G services being made widely available in Sweden and Estonia, has estimated a benefit ratio of 1.5:1. In light of the very large impacts of deploying full fibre, 4G in particular is enhancing and accelerating benefits further purely as a result of its mobility. This provides a baseline for deployment of 5G. It is highly likely that 5G will in the end be significantly higher than a benefit ratio of 1.5:1 simply because it will open significantly more opportunities for new services and innovation than 4G. The diagram below, (from the WEF document) gives the roadmap for 5G impact areas which goes far beyond 4G.

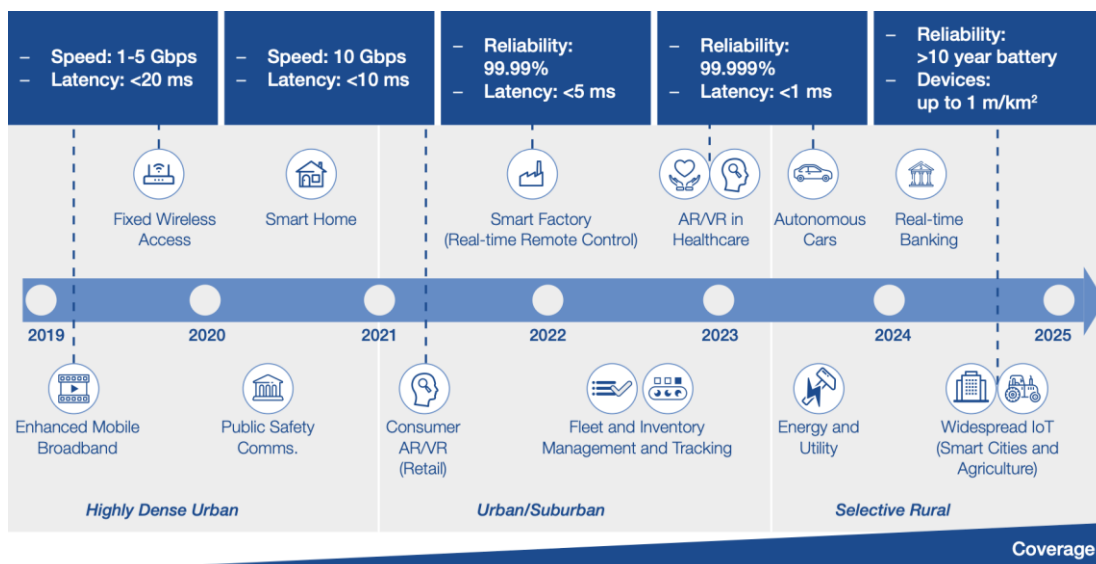


Figure 11 - 5G Journey

A critical need to underpin network and service deployment is to enhance the demand and the skills in the region. The Use Cases around 5G are in their infancy but offer significant opportunity in creating new jobs and services. Innovation will be what determines the beneficial use of this technology. Interventions that involve the supply side must therefore also include ways in which to gain skills in the technology itself but also in supporting different sectors in their digital transformation journeys.

The range of benefits that can be achieved are laid out in section 1.2, with the understanding that both private and public sector bodies can achieve multiple benefits through enhanced connectivity. However, the benefits available which then go on to be secured are dependent on many factors, often depending on the sector in which the organisation operates and the skills and knowledge they have around digital innovation and application. A general overview of expected benefits is;

- Uplift in GVA³⁰
- Safeguarding jobs
- Creation of new high value jobs
- Development of new sectors and inward investment

Benefit Outline	Next Generation Wireless
Productivity improvements	Digital Transformation enabler
Innovate new business models and open new markets	Digital Transformation enabler
New business start-ups	Innovation in digital services
Network Building & Support Employment	Wider skills needed at the network edge as functionality migrates outward from the traditional Data Centre approach
Skills Development	Demand for digital skills increased
New Working Practices	Collaborative and distributed working ³¹
Teleworking to Stimulate Rural Business Models	Wireless digital service access
Private Household Benefits	Smart Homes
Sustaining Communities	Teleworking and distributed working
Enablement of 5G	Access to fibre
Smart Cities/Homes Infrastructure	Enablement of IoT services
Industry 4.0	Smart Manufacturing
Healthcare Benefits	Innovation in services delivered digitally ³²
Positive Environmental Impacts	Reduced need to travel
Social Inclusion and Removal of any Digital Divide	Widespread access to advanced digital services

³⁰ Report from dot.econ for BT NI gives a GVA uplift range of 3% - 11% across four rural counties of England. These figures are much higher than others.

WIK report to Ofcom 2018 gives a 0.5% uplift

³¹ Covid 19 has been a driver which will have long term consequences for working practices

³² Covid 19 experiences will continue to drive this service sector

Table 22 - Benefits for Next Generation Wireless

Quantifying benefits across what is a very diverse set of private sector and public sector enterprises in the region is not possible at this stage, it can only be assessed in aggregate in line with the economic assessments that have been undertaken on the impact of digital connectivity in the UK and Europe.

1.5.6 Risks, Constraints and Dependencies

The constraints for Digital Infrastructure are bound within;

- SBCD governance procedures.
- Stakeholder co-ordination and participation in any proposed intervention. In particular the authorities (and potentially other public sector bodies in the region) will need to use and anchor any infrastructure deployed. This will have implications for delivery of IT and other services
- Supplier appetite to invest in the region
- Available funds which may require intervention scale prioritisation by SBCD leadership
- Resources and skills necessary to lead and manage the interventions
- The appetite for SMEs in the region to adopt and innovate new digital ways of working
- Coordination with other regions in Wales to ensure a joined-up approach and shared learnings
- State Aid considerations

Intervention funding by SBCD should be on a match funded basis with the private sector and spending should target the delivery of specific 5G coverage.

It is very likely that in the rural dimension of 4G, some of the spending options to deliver infrastructure could require significant grant funding, with little likelihood of achieving a claw-back should the revenue generated by the infrastructure become net positive to the supplier. It would be sensible to refrain from entering into any 4G interventions directly while the SRN³³ intervention is defined. What would be worth investing in is driving the agenda for the region in terms of SRN outcomes for the region. The benefit ratio for this could be significant considering the low cost of investment required.

In terms of the dependencies, the key issue is to ensure that any 5G use cases deployed in the region are effective, deliverable and subsequently stimulate commercial investment in the region.

³³ SRN is a match funded £1bn fund

The primary risks associated with the Next Generation Wireless are given in the table below;

Risk	Mitigation
Resources constraints	SBCD will require a dedicated Digital team to manage the range of interventions envisioned. This will include, funding applications, procurements, stakeholder liaison, supplier engagement and interaction with external national and regional schemes
State aid challenges	Clearly defined legal and regulatory guidance required to frame selected options and activities
Intervention timescales under Digital Infrastructure exceed five years due to governance or management issues	Prioritise actions within the Commercial and Management case to ensure benefits are delivered against early adoption, (first 2 years)
Demand side interventions are not fully harmonised with connectivity interventions	Ensure project plans have clear timelines and actions that recognise the interdependency with demand side stimulation. Extend the skills and training remit within the City Deal to encompass supporting digital transformation and innovation of use cases making use of the Digital Infrastructure
Use Cases are not well defined and benefits are not specific	Ensure a simplified 5 Case model is used to draw up the business case for each project to be supported under Next Generation Wireless. Assessment should take a wider view related to achieving proof of concepts and market viability demonstration
Levels of skills around digital innovation and transformation within SMEs mean that take-up is low.	<p>Extend the skills and training remit within the City Deal to encompass supporting digital transformation and innovation of use cases making use of the Digital Infrastructure</p> <p>Consider the creation of a digital transformation centre of excellence that can support multiple sectors in an economic manner</p>
5G network availability fails to attract other uses once deployed, the initial use case project being the only user	Utilise demand side stimulation and innovation support to exploit the availability of 5G services across the SMEs and organisations within the coverage range of the network
Digital Infrastructure is delivered in a fragmented way, lessening the impact and the leverage that could be achieved by wider fibre and 5G services	Make the interdependencies between the intervention types clear and include these within the critical success factors

Table 23 – Next Generation Wireless Risks

2 Economic Case

2.1 Introduction

The outcomes from the strategic case are to ensure that:

- Towns, cities and development zones have access to world class full fibre infrastructure to deliver economic growth and inward investment
- There is widespread equality of access to broadband services across the region (notably in rural areas) to deliver social cohesion, efficient delivery of public services and economic growth
- SBCD is at the forefront of development and roll out of world class next generation wireless services.

A secondary objective is to identify and facilitate any additional digital infrastructure required to ensure the success of the 9 other City Deal projects.

A long list of options has been defined for each of these segments. Each of these will also have a different mix of success factors applied in the selection of the preferred option(s).

2.2 Critical Success Factors

In order to give a completely rounded consideration, the critical success factors for the digital infrastructure project should include;

Success factor	Measurement Criteria
Strategic fit	<ul style="list-style-type: none"> • Meets the strategic goals of the SBCD • Delivers future proofed digital infrastructure to enable to achieve economic and social objectives • Supports wider Welsh priorities and strategies • Is at least comparable with elsewhere in UK
Economic return	<ul style="list-style-type: none"> • Achieves a viable cost benefit ratio when compared with the other available options
Achievability	<ul style="list-style-type: none"> • Fits with the region's resources • Follows a clear, timely and deliverable approval route and delivery timeframe • Has political and stakeholder support across region and delivers benefits to all parties • Is fully state aid compliant and does not require new state aid applications • Is sustainable with the flexibility and scalability to serve the regions requirements as the economy grows.
Attractiveness to Supply side	<ul style="list-style-type: none"> • A clear delivery model is agreed • There is supplier appetite for investment in the region
Compatibility with other programmes	<ul style="list-style-type: none"> • No overlap or duplication of effort with other national or regional digital infrastructure investment programmes. • Fully aligned with UK and Welsh digital policy objectives
Risk Management	<ul style="list-style-type: none"> • Financial • Operational • Legal and Regulator, N.B. state aid

Table 24 - Digital Infrastructure Specific Success Factors

2.3 Long List Options

This section presents the long list of options. This has been analysed and presented for each of the three areas of the Digital Infrastructure project as previously defined. This is because:

- The economic impacts and cost benefit ratios are different between rural and urban areas
- The range of options differs by area as each has different requirements and potential delivery mechanisms
- External issues such as the role national programmes and the impact of state aid are varied across the pillars
- Supplier appetite for investment will vary across the region.

2.3.1 Rural Programme

It should be noted that the options laid out are not mutually exclusive. They can, and in many cases, should be combined to achieve the most beneficial outcomes.

A long list of options for SBCD to address the challenges within the rural communities has been defined.

As seen in the strategic case there are currently over 20,500 white premises in the region unable to receive a 30Mbps broadband service following all planned interventions. These are shown below

Authority	White Premise ³⁴
Carmarthenshire	9,480
Neath Port Talbot	16,506
Pembrokeshire	6,366
Swansea	3,052

Table 25 - White Premises by Local Authority

In addition, some 11,000 of these are beneath the Universal Service Obligation of 10Mbps as shown below;

Authority	Premises below USO
Carmarthenshire	6,170
Neath Port Talbot	223
Pembrokeshire	4,079
Swansea	602

Table 26 - Premise Counts by Local Authority

We estimate that there will remain a significant gap in service provision in the region, even after the role out of DCMS and Welsh Government led interventions. Therefore,

³⁴ The EU term 'White Premises' indicates unable to receive an NGA broadband service

the following options offer opportunity for the Digital Infrastructure intervention to address these areas.

Long List Options

Option 1: Do Nothing

Description and Rationale:

No actions or funding provided by SBCD. Market left to deploy infrastructure against their own investment criteria, or with support of the UK and Welsh Governments programmes

Costs:

£ 0

It should be noted there is an opportunity cost to the region of doing nothing. This will include:

- A loss on inward investment; If SBCD fails to intervene in the market and/or anchor investments there will be a loss of commercial investment.
- A % of the region will not receive commercial broadband services. If 5000 households and SMEs were to be excluded in this manner the loss of economic benefit over a 15-year period is estimated to be >£80m

Benefits:

£ 0

NOTE: Once the USO and Superfast Cymru 2 interventions take place, they in themselves they will produce a positive economic impact. Typically, an investment into a remote rural site produces a benefit: cost ratio of 3.5:1 over 15 years. Hence if the number of white premises was reduced by 10,000 at a cost of £3000 per site, the economic benefit can be expected to be over £100m over 15 years. However initial indications are that the SBCD is likely to receive proportionally less investment than other more densely populated parts of South Wales and Superfast Cymru will not have the financial resources to address the requirements of the most remote and costly parts of the SBCD region to serve.

Issues/Risks:

- There will be a risk of deepening the digital inclusion gap across region
- No local control of priorities – dependent on industry and national initiatives
- Lack of inward investment. Elsewhere in the UK public sector intervention has resulted in leveraged commercial investment.
- Social loss – percentage of households with limited access to healthcare, education, access to social care and public services will increase but potentially very slowly, leaving some areas with no or minimal connectivity
- Economic loss – lower productivity, inability to work in flexible manner, reduced employment opportunities
- Environmental – increased carbon footprint

Option 2: Do Minimum: Supply Side Engagement

Description and Rationale:

SBCD to proactively engage with market. Activities to include:

- Briefing industry on regional plans and requirements
- Lobby for inward investment
- Promotion of region as test bed for new technologies and services
- Arranging site visits, events etc
- Providing single interface between industry and the regional public sector bodies and a point of contact for issues such as planning, way leaves etc
- Co-ordination of programmes with UK Govt and Welsh Government

Such activity has proven a key catalyst for inward investment elsewhere in the country and there have been examples of plans changed by operators such as City Fibre and Virgin Media. Suppliers are faced with multiple opportunities and are often responsive in their planning.

Costs:

£ 100k per annum

Benefits:

Easier to target support and to coordinate other funding channels to benefit the region and SBCD. Increased investment by operators over and above 'Do Nothing'. Harmonisation with other initiatives such as SRN for 4G and maximising its impact.

To be monitored against clearly defined targets for inward investment and service provision.

Target additional £5m of inward investment stimulated over the five-year programme plus successfully obtained £10m of public grant funding

Issues/Risks:

- Limited financial exposure to SBCD
- Time to implementation reducing potential impact achieved
- Regional priorities may be ignored
- Service take-up may not improve
- Competition for investment from other parts of UK leaves the region behind
- Supplier appetite for regional investment may be limited
- The most remote, commercially challenged part of the region will be difficult to attract inward investment to

Option 3: Do Something: SBCD Demand Stimulation Programme

Description and Rationale:

SBCD establish a local programme to increase user awareness and adoption of digital services across the entire population of SMEs and households. Activities would include:

- PR and promotion
- Establishment of case studies of benefits and usage
- Engagement with local stakeholders such as business groups, community organisations etc
- Events
- Promotion of connection voucher schemes of UK and regional Govt
- Engagement with suppliers
- Engagement with local businesses and residents
- Support and training programmes
- Use of social media
- Web based support
- Provision of technical, commercial and legal support to community groups

Costs:

- Local team of 2 staff per authority area – £100k per area, £400K per annum across the region. For a five-year programme, £2m
- Additional promotional materials and support, £600k per annum
- To be monitored against clearly defined targets for inward investment and service provision.

Benefits:

Key measures of success will be monitored on an annual basis and will include:

- service adoption by business and residents
- business productivity
- employment and start up rates

Target an additional 5% uptake in Next Generation Broadband Access services over 5-year period i.e. approx. 17,000 premises in the region

Research commissioned by DCMS the economic, social and environmental impacts of faster broadband – UK Economic Impact Study. Economic benefits identified were local enterprise employment, teleworker productivity, productivity growth, labour force participation and network construction. Enhanced productivity is the key productivity with benefits growing by 0.3% as speeds double. A more direct comparison of the proposed SBCD intervention is the Impact Analysis undertaken for the Universal Service scheme. This analysis discounts benefits due to the nature of the programme under a range of speeds and subsidy scenarios. However, all options deliver a positive outcome and value for money (over 15 years) with a Benefit Cost Ratio of between 3.4 to 3.6

In addition, there are currently 3000 business sites in the region unable to access 30Mbps services. It is likely that some of these business sites will receive services as a result of Superfast Cymru 2, DCMS LFFN and USO initiatives.

It is estimated that there may be up to 2000 SMEs that would benefit from a local business support programme.

Issues/Risks:

- Limited financial exposure to SBCD
- Time to implementation
- Service take-up may not improve
- Need for co-ordination with national and regional schemes
- Demand stimulation only serves to increase take up in those areas that have infrastructure to take up. There will still be parts of the region without any infrastructure and demand stimulation does not address their requirements or lead to infrastructure investment

Option 4: Do Something: SBCD In-Fill Procurement

Description and Rationale:

It is acknowledged that the existing proposed national and regional initiatives will still leave a number of SME and residential premises un-served or poorly served. This is because:

- Welsh Government Superfast Cymru 2 lacks the funding to achieve ubiquitous coverage
- Superfast Cymru 2 targets an uplift in connectivity speeds to at least 30Mbps. It does not prioritise premises beyond this. Hence the supply side response is to target premises with the lowest upgrade costs. This will likely lead to premises with current broadband services below the threshold speed, (10 – 30Mbps), being prioritised over those with very poor, (<10Mbps), or no services at all.
- DCMS programmes are dependent on proximity to public sector sites. This is a state aid issue. DCMS does not have a state aid clearance for its LFFN and RGC programmes and hence can only fund connectivity to internal public sector sites which is a 'no aid' measure
- USO schemes will provide funding for in-fill are not timely for this programme with potentially years before services and delivery options are determined
- The number of premises in the region to be addressed following the impact of these schemes estimated at <5000 premises
- SBCD implements its own procurement programme to address this gap. The procurement would be similar in scope to Superfast Cymru 2. However, SBCD MUST be clearly able to define local priorities, evaluation criteria and targets and not be dependent on those of the Welsh Government

Costs:

Superfast Cymru 2 is likely to primarily address the 'low hanging fruit' i.e. those sites that are cheapest and easiest to serve in urban centres. The outlying 20,500 sites are estimated to have a typical cost per site of £4500. This would result in a funding requirement of £92m.

However other national funding interventions are coming on stream over the next 2 years and SBCD will need to address what these measures will not fund rather than the total requirement.

In particular

- Number of USO sites in region is currently 11k. Hence there is the potential for central govt USO funding of approx. £37m in the region.
- DCMS Rural Gigabit Connectivity funding, this programme is limited to £200m per year nationally, so a reasonable assumption is that the region receives a further £10m

Provided DCMS and Welsh Govt initiatives and USO funds are delivered, SBCD will require a focused and relatively modest intervention to complement these other initiatives - £20m based on 4500 premises at £4,500 per premise.

In addition, there will be one off costs for the conduct of the procurement. This will be approx. 250k over a nine month to a year period

Benefits:

Economic benefit impact analysis undertaken as part of the audit of rural broadband programmes range from;

- The DCMS UK Economic Impact Study concludes that every £1 invested in broadband delivered £20 in benefit over a 15-year period.
- A similar analysis of the benefit of Superfast Cymru presented a cost benefit ratio of 6 to 1

Within the assessments, economic impacts identified include local enterprise employment, teleworker productivity, productivity growth, labour force participation and network construction.

In addition, a range of social benefits also accrue including; reduced travel time, access to education, improved health, consumer access to e-commerce, enhance employment opportunities, rural community resilience and environmental benefits (e.g. reduced emissions).

This USO economic impact analysis discounts benefits due to the nature of the programme under a range of speeds and subsidy scenarios. However, all options deliver a positive outcome and value for money (over 15 years) with a Benefit Cost Ratio of between 3.4 to 3.6

Hence an intervention of £15m by SBCD is likely to deliver positive benefits of approx. £50m to the region

The other key benefits of such an approach are;

- speed of delivery
- reduced dependency on national programmes
- more control over national programmes
- improved local focus and prioritisation

Issues/Risks:

There are two major issues/risks

- ensuring any SBCD led procurement is complementary to, and not competitive with, other national and regional programmes and there is no overlap or duplication of finance or effort. This will require co-ordination with the UK and Welsh Government
- State Aid: The telecommunications market is highly regulated with strict state aid regulations. SBCD could not undertake its own procurement without state aid clearance as it will effectively be funding services in the same intervention area as national programmes. The ability to get a state aid clearance is time consuming (typically 18 months) and resource intensive. Telecoms state aid is also administered and controlled at an EU level and it remains how this will be resolved moving forward given Brexit

An alternative way to mitigate against these risks is to utilise any state aid clearances and procurement resources of the Welsh and UK Governments. Consideration is being given to the establishment of a Welsh Dynamic Purchasing System that would enable Welsh regions to procure enhanced broadband coverage. This is still to be defined and much will depend how it will operate. SBCD will not wish to simply 'top up' a national scheme. However, there may be

benefits to using the national procurement resources if SBCD is able to shape its own targeted requirements

Option 5: Do Something: SBCD Community Programmes

Description and Rationale:

A number of communities have collaborated to define and procure their own telecoms infrastructure or establish themselves as a micro service provider in their community. Such activity has been supported by public funding schemes (e.g. Community Broadband Scotland). The Welsh Government is also defining a Communities Initiative. In addition, support and guidance can be provided in areas such as procurement, legal support and state aid.

Costs:

Typically grants are made available to a community. These may range from small grants community size but across other parts of the country typical community grants were low hundreds of thousands pound per community with some rare larger exceptions. The Scottish Government spent £6.4m supporting 64 communities but in practise only 13 of these are fully operational. The scheme has now ceased

A modest fund in the region of £1m could be allocated to an SBCD community programme but MUST be complemented by technical, procurement and legal support to be effective. The support function should be limited to a team whose cost is capped at 20% of the fund.

Benefits:

The benefits are focused on speed to service provision for the most rural communities that are often neglected by the roll out plan of the commercial operators and, indeed, national procurement programmes.

Issues/Risks:

All cite challenges;

- There are limited (if any) communities in the region prepared for such a scheme
- State Aid rules apply to all projects irrespective of grant amount (even de-minimis) and state aid schemes are not suited to small community projects
- Empowering communities should not imply communities leading procurements. It is challenging to expect communities to be responsible for public sector procurement rules and SBCD support will be required here.
- Projects need to happen alongside a national and regional programme. Agreeing scope with national projects can be complex and sensitive: who (and when) agrees a de-scoping of an area from the national programme for local investment?
- What is the appetite of local communities for bespoke projects involving potentially small ISPs (no choice of national providers)?
- Engaging with communities is essential to identify projects suitable for the fund, but engagement with the market to understand appetite in delivering to small communities is critical

- There is a high failure rate with such schemes due to administrative complexity, low supplier appetite, a lack of resources and skills and the challenges of on-going operation and management.
- Importance of management of communication and expectations with communities (timescales, funding, solutions, ISP choice ...)

2.3.2 Connected Places Programme

In addition to the rural sites there is a requirement for new duct and fibre infrastructure to be built in key development corridors and zones to underpin the innovative projects outlined in the Strategic Case.

Long List Options

Option 1: Do Nothing

Description and Rationale:

- No actions or funding provided by SBCD. Market left to deploy infrastructure against their own investment criteria.
- No co-ordination or aggregation of purchasing power of public sector in the region to stimulate additional investment

Costs:

£0

Benefits:

£0

Issues/Risks:

- There is a risk that there will be a concentration of investment into the key urban centres of the region only. e.g. BT has announced investment programmes into central Swansea postcodes along with Carmarthen and Cross Hands. Other towns and suburban areas may not see investment in the foreseeable future. The impact would be negative, with limited or no inward investment and digital transformation, including digital led innovation. It would inevitable reinforce the drift of employment towards the Urban areas, particularly Swansea or outside the region.
- There will be a lack of competition and choice in the region that will impact service availability and pricing
- Social loss – very limited improvement to households with access to healthcare, education, access to social care and public services,
- Economic loss – productivity, inability to telework, reduced employment opportunities,
- Reduced ability to attract digital intensive sectors into region (e.g. media, finance)

Option 2: Do Minimum: Supply Side Engagement

Description and Rationale:

SBCD to proactively engage with market. Activities to include:

- Briefing industry on regional plans and requirements
- Co-ordinate public sector procurement activities
- Lobby for inward investment
- Promotion of region as test bed for new technologies and services
- Arranging site visits, events etc
- Providing single interface between industry and the regional public sector bodies and a point of contact for issues such as planning, way leaves etc
- Co-ordination of programmes with UK Govt and Welsh Government

Such activity has proven a key catalyst for inward investment elsewhere in the country and there have been examples of plans changed by operators such as City Fibre and Virgin Media. Suppliers are faced with multiple opportunities and are often responsive in their planning.

Stakeholders within the SBCD region have been following this policy for a number of years but the impact has been constrained by the challenges and cost of deploying infrastructure in a large diverse region. In addition, the level of competition in the region is low compared with other parts of the UK which has resulted in a limited incentive for investment by incumbent infrastructure providers.

Costs:

£ 100k - £150k per annum

Benefits:

Easier to target support and to coordinate other funding channels to benefit the region and SBCD. Increased investment by operators over and above 'Do Nothing'. Harmonisation with other initiatives such as Welsh Mobile Action Plan and delivering on its recommendations.

To be monitored against clearly defined targets for inward investment and service provision. An indicative target could be to attract an additional £5m of inward investment stimulated over the five-year programme plus successfully obtained £10m of public grant funding.

It should be noted that projected digital infrastructure grant funding streams from central Govt are planned to be in the order of £200m per annum across the UK with perhaps £10-£20m likely to come to Wales.

Issues/Risks:

- Limited financial exposure to SBCD
- Time to implementation reducing potential impact achieved
- Regional priorities may be ignored
- Competition for investment from other parts of UK

- Supplier appetite for regional investment may be limited and, if so, Option 2 will not deliver the required infrastructure and resulting economic benefits to the Connected Cities in the region.

Option 3: Do Something: Asset Investment Programme

Description and Rationale:

- SBCD authorities to invest in duct infrastructure or encourage third parties to do so. Duct infrastructure to be built in key transport corridors and economic development areas
- Local policies and initiatives put in place to encourage duct build whenever regional building or transport infrastructure is being deployed
- Potential to allow third party telecommunications operators to deploy fibre in ducting to reduce deployment costs

Costs:

- Estimated duct costs of £50-£100per metre dependent on terrain. May be reduced if sharing dig costs with other infrastructure.
- Estimated duct mileage required across key identified development zones is approx. 150-200 km, giving an indicative investment range of approx. £10m

Benefits:

- Reduced cost of investment for fibre service providers seeking to invest into region
- A return on the investment can be gained over a 15-year timeline from access charges.
- Stimulate inward investment and deployment by commercial operators
- As there is no guarantee of investment by operators in laying and operating new fibre in the ducts, the economic impact is not certain. If routes are carefully chosen and the roll out is staged by only preceding with phases when some commitment is given by the private sector, then a multiplier of 6 to 1 would be appropriate leading to the investment of £10m returning of the order of £60m

Issues/Risks:

- Ducting will have to be offered to the market in compliance with state aid regulations. Will require state aid assessment and benchmarked pricing
- SBCD authorities responsible for ownership and operational maintenance and operation of ducting
- May be limited appetite by industry to use the ducting outside of key commercial areas
- Ducting will have to be built to a standard acceptable to the industry for use, (Carrier Grade)
- The procurement, planning and build of infrastructure is likely to be take a minimum of 2-3 years to deliver
- If SBCD authorities are to facilitate commercial usage of the ducting a state aid opinion will need to be sought (see commercial case).

Option 4: Do Something: SBCD procurement

Description and Rationale

- SBCD authorities to procure either a managed service and/or fibre infrastructure to all public sites across the defined development zones. (Note public sector sites only chosen to comply with state aid regulations). Service definition may be a blend across the region based on local requirements and commercial appetite to deliver services.
- Anchor investment by the public sector will seek to stimulate additional private sector investment by commercial sector in area
- Procurement to deliver full fibre connectivity across Milford Haven/Pembroke Dock, Llanelli, Haverfordwest, Fishguard, Swansea city area and key development areas in Neath/Port Talbot.

Costs:

- Estimated capital investment of £20m across region
- Note this estimate in an upper ceiling based on building new duct and fibre to an indicative footprint on public sector sites in the region as developed for the regions LFFN bid. It is an upper limited on costs for Options 3 and 4 combined (e.g. if the region had investment £10m of ducting in Option 3 and facilitated commercial use of the ducting the resulting costs of commercial investment would be reduced. In contrast if no public ducting was available the commercial sector would need to invest £20m.

Benefits:

Stimulate inward investment by commercial telecoms sector into region. Experience has shown that commercial investment in a City region typically has a leverage of 6:1. Hence a £20m investment into such infrastructure could deliver a further an additional £120m of private sector investment

Enhanced service choice in the region

An analysis of direct economic benefits to only the Swansea City area of such investment is estimated at £133m over 15 years, broken down as follows; (source Regeneris)

- network build £25m
- productivity improvements in local businesses £11m
- innovation £10m
- business start-ups £12m
- worker flexibility £14m
- housing wealth £61m.

In addition, Regeneris also modelled other indirect benefits not included in the £133m

- enhanced ability to deliver 5G £240m
- smart city £44m

- industry 4.0/IoT £92m

If such a network was deployed beyond the City of Swansea to include Neath Port Talbot Llanelli, Pembroke and Milford Haven the estimated economic impact over 15 years would be approx. £200m.

Issues/Risks:

- SBCD will need to undertake the procurement. Cost approx. £250k over a 9-month timeframe
- Funding would need to be filled by a blend of public sector and commercial contributions (NOTE in other areas of the UK some authorities have capitalised future telecoms revenue expenditure as a contribution to projects of this nature)
- The PSBA will need to deliver its services over any new infrastructure built/deployed in the region. This will need co-ordination and possible investment in new equipment and service provision
- The question remains, will there be industry appetite to invest across the regions priority zones or only in Swansea City
- The procurement can only address connectivity to public sector sites to avoid the risk of state aid challenge.

2.3.3 Next Generation Wireless Programme

The options range across mobile connectivity and are related to coverage and capacity for 4G and 5G networks, also IoT networks which may or may not be specific to IoT services, as outlined in the Strategic Case.

Long List Options

Option 1: Do Nothing

Description and Rationale:

No actions or funding provided by SBCD. Market left to deploy infrastructure against their own investment criteria

Costs:

£0

Benefits:

£0

Issues/Risks:

- 4G coverage is in this case likely to improve slowly and mainly be based upon actions by the MNOs related to SRN³⁵. 5G will not progress deployment beyond Swansea City Centre until after 2021 and would only reach all regional Urban areas by 2023 at the earliest. Targeted deployments to support areas of concentrations of digital sector businesses unlikely before 2023.
- Gaps will remain across the region, in particular the variation in coverage between the mobile operators will continue to mean that the selection of a mobile service provider further reduces the coverage perceived.
- Limited commercial support from MNOs for the deployment of advanced mobile services in the region, so reducing the opportunities for innovation and digital transformation
- This has been the situation in the region for the last fifteen years, which has resulted in the region being behind on 3G and 4G coverage when compared to the rest of the UK. In economic impact terms, there is general consensus that the absence of 4G services has a detrimental impact to consumers and businesses in terms of productivity and to jobs. However, the range of figures applied to these measures is wide and focussed on the applications 4G enables rather than the technology itself.
- Economic loss – Direct negative impact on productivity, GVA and consumer adoption of digital services. Reduced ability to attract digital intensive sectors into region (e.g. media, finance). Delay or frustrate the adoption of 5G enabled use cases across multiple sectors.
- Environmental – reduction in carbon footprint, but likely over a long period of time

³⁵ Timeframes for SRN are still unclear and any impact can be expected to be at three years away, 2023/4

Option 2: Do Minimum: Supply Side Engagement

Description and Rationale:

SBCD to liaise with mobile industry to;

- Briefing industry on regional plans and requirements
- Lobby for inward investment
- Promotion of region as test bed for new technologies and services
- Arranging site visits, events etc
- Providing single interface between industry and the regional public sector bodies and a point of contact for issues such as planning, base-stations location, asset location, etc
- Co-ordination of programmes with UK Govt and Welsh Government

Such activities have not yet been executed fully in the UK, although digital leads for fixed infrastructure do cover mobile as well. Suppliers are faced with multiple opportunities and are often responsive in their planning if they can simply;

- **access the processes needed for deployment of infrastructure,**
- **more fully understand the market they are addressing and**
- **have a good understanding of the initiatives and plans of the public sector that affect the market and density of consumers.**

Costs:

£100k - £150k per annum, with a cap of a five-year programme reaching £500k to £750k

Benefits:

- Easier to target support and to coordinate other funding channels to benefit the region and SBCD. Increased 4G investment by operators over and above 'Do Nothing'. Harmonisation with other initiatives such as SRN and maximising the benefits they can deliver to SBCD. To be monitored against clearly defined targets for inward investment and service provision.
- Additional £3-5m of inward investment stimulated over 3 years.

Issues/Risks:

- Limited financial exposure for SBCD
- Time to deployment for 4G may be 3 years as Wales is not high priority under SRN, reducing potential impact achieved
- Regional priorities for 5G will have to be limited to dense urban locations
- Service take-up for 5G may not be extensive due to device costs
- Innovation in usage not addressed fully
- As there is little certainty around the impact of undertaking this option, the issues and risks around 'Do Nothing' also apply. The level to which they can be truly mitigated through supply side engagement is uncertain and there is little evidence from other areas of the UK where this approach has made a material difference

Option 3: Do Something: Undertake Future Telecom Infrastructure Review guidance in full & Driving SRN

Description and Rationale:

The thrust of the Telecoms Review and the SRN is to make it easier and cheaper for mobile operators to expand 4G coverage and introduce new services such as 5G and IoT. Fundamentally, this requires SBCD, along with support from local authorities in allowing their asset usage and in addition streamlining the planning and licensing processes. A higher degree of responsibility and autonomy would be required over Option 2, Supply Side Market Engagement. Responsibilities would include:

- Building a small central team to organise and support Local Authorities to deliver streamlined access and services to support mobile operators in building more coverage and services in 4G, 5G and IoT. In effect following the guidance provided for lowering the cost to MNOs of building infrastructure and shortening the time this takes
- Briefing industry on regional plans and requirements
- Lobby for inward investment
- Lobby Ofcom and DCMS to support a more targeted approach to regulation in Wales, to assist with the specific issues around lack of investment in mobile services and coverage
- Promotion of the region as a strong market for new technologies and services
- Innovation stimulation through knowledge transfer events and information promotion
- Joint business and industry events with connectivity service providers to promote innovation and identify key development areas in which deploying 4G and 5G can stimulate growth and inward investment
- Providing a highly effective and efficient single interface between mobile operators, industry and the regional public sector bodies to enable all aspects of deployment support
- Co-ordination of programmes with UK Govt and Welsh Government

Such a role has not yet been executed fully in the UK, although digital leads for fixed infrastructure do cover mobile as well. Suppliers are faced with multiple opportunities and are often responsive in their planning if they can more fully understand the market they are addressing and have a good understanding of the initiative and plans of the public sector.

Costs:

£250k - £500k per annum, with a cap of a five-year programme reaching £1.25m to £2.5m

Benefits:

Strong focus and leadership to target supportive interventions and to coordinate other funding channels such as DCSM, to benefit the region and SBCD.

Materially increased investment by operators over and above 'Do Nothing' through supporting actions.

Lowering the threshold for mobile operator's investment decisions through lowering the cost of deployment and doing business in the region. In addition, leveraging the market information held by the authorities on business locations, sectors and numbers to provide better revenue forecasts for the mobile operators.

Working closely with mobile operators would enhance their knowledge of the region and improve the identification of skills needed and the promotion of providing those skills from local resources. Mobile operators through a knowledge transfer programme would be made aware of other inward investment activities and jobs creation to inform their opportunity to enhance services and coverage to seize market share as early as possible.

Promoting the ideas of infrastructure sharing, including access to fibre connectivity for backhaul services.

Harmonisation with other initiatives such as SRN and delivering on its recommendations. To be monitored against clearly defined targets for inward investment and service provision, notably 4G and 5G coverage in key corridors, capacity and data rates comparable with elsewhere in the UK. Increasing the effective choice of mobile service providers, notably in rural areas by having competing deployments.

Additional £7m of inward investment stimulated after 3 years.

Issues/Risks:

- Limited financial exposure for SBCD
- Participation of all four local authorities necessary and a significant uplift in local skills and expertise
- Local Authority willingness to cede some responsibility and delivery to SBCD to support mobile operator's deployment of networks, including information and access to infrastructure assets
- Local Authorities undertaking this type of action individually³⁶ would miss significant efficiency gains by having a single central team and likely mean that skills overall would be lower
- Single point through which to do business not consistent, caused by variability in local authority engagement
- **Telecoms operators** fail to engage because there is no material improvement in their prioritisation and future planning for investment in the region due to a perceived weak uptake of 5G services

³⁶ The FTIR document set seems to anticipate that Local Authorities would act individually. This would be very inefficient for the region.

Option 4: Do Something: Funded Intervention to extend 4G coverage

Description and Rationale:

Work in conjunction with the mobile operators to gap-fund mobile services in areas with poor indoor and outdoor coverage. Maximise the regional benefits from the SRN by fully engaging with DCMS and Welsh Governments on the process and how SBCD can be prioritised for additional 4G coverage. Organising and supporting Local Authorities to deliver streamlined access and their planning services etc. to support mobile operators in building more coverage and services in 4G & 5G, including the public sector providing intervention funding for radio access infrastructure (towers, roof-top sites and ducting) and offering these to operators under a site sharing regime to simplify and reduce the operators cost base. This would also include:

- Providing single business interface between Telco industry and the regional public sector bodies and a central resolution point for issues such as planning, wayleaves etc. Duplication of Option 3
- Co-ordination of intervention programmes with UK Govt and Welsh Government
- Providing Capex and Opex funding to support loss making 4G sites in terms of their usage and data throughput. This could include;
 - Upgrading all 3G sites to 4G equipment, accelerating deployment
 - Building new passive infrastructure sites, (towers, mono-poles and roof-top sites)
 - Deployment of 4G/5G active equipment to new sites
 - Building new duct work to support fibre backhaul links to sites

Costs:

Costs: £250k - £500k per annum, with a cap of a five-year programme of £1.25, to £2.5m.

Capex for infrastructure costs would range between £30k and £150k per site and be additional, assume 100-300 macro sites with a 40/60 risk share and half of these sites falling within SRN = 150 sites at average £60k = £9m.

Benefits:

- Increased investment by operators by lowering their threshold in terms of direct costs and the cost of doing business in the region for Mobile operators.
- Harmonisation with other initiatives such as SRN and delivering on its recommendations.
- To be monitored against clearly defined targets for inward investment and service provision, reflected in coverage improvement across multiple mobile operators and service enhancements to 4G & 5G.
- This should be delivered over a 3-year window and thereby quickly reduce the timescales in which parts of the region are likely to remain a poor or not spot.
- Additional £30m of inward investment stimulated after 5 years.

Issues/Risks:

- Currently the Mobile Action Zone consultation documents indicate that there is a need to build a large number of sites. This is based on latent demand, NOT areas with poor coverage, SRN would be targeted at a large number of sites, but this is unquantified at this time³⁷.
- Funding would need to be flexible, as any infrastructure to be built by the public sector would need to have a fixed tenancy agreement from one or more mobile operators, take up is therefore uncertain.
- Any infrastructure asset constructed by the public sector would need to be 'Open Access' and would represent an asset that would be expected to make a return. If sites were rented to mobile operators at a market rate (which may be a requirement under state aid) then the real savings to mobile operators would represent a cash-flow impact, not a true cost reduction.
- Agreement on where to build new infrastructure assets may be difficult to achieve, Operators would in all cases seek to maximise a return on their investment, resulting in current not-spots remaining so, unless SRN or individual investment cases for the operators demonstrate viability
- The Emergency Services Network already has a programme of extending 4G coverage and supporting the building of infrastructure in terms of Macro base station sites. There is an opportunity to work closely with this programme to encourage a wider extension to the coverage provided.
- Active equipment within the network being funded is an asset that could achieve a return through customer usage increasing.
- Investment in active equipment would need to carefully be considered as it could breach state aid rules and benefit a single supplier. Making active equipment 'Open Access' is highly problematic in terms of the current business model operated by mobile operators.

³⁷ https://www.ofcom.org.uk/__data/assets/pdf_file/0031/192919/notice-of-compliance-verification-methodology.pdf

Option 5: Do Something: Support for Specific 5G/IoT Projects

Description and Rationale:

Work in conjunction with the mobile operators to operate a risk-based gap-funded mobile services in areas where there is a good use case to demonstrate the commercial and innovation impact of 5G/IoT. This option should be undertaken in conjunction with Option 3. Gap funding would be on the basis of joint investment in infrastructure and active network equipment and involve either a competitive process or partnership with a mobile operator on a case by case basis.

Purely as an example of projects, both core SBCD projects and others that should be considered are shown in the following table as 5G opportunities:

Project	Example Use Cases	5G	IoT	FttP	4G Adv
Waterfront Digital District	Media & Content production Cloud services	✓	X	✓	X
Pembroke Dock Marine	5G IoT Sensor Array - Manufacturing IoT Sensor Array - Energy Mgt	✓	✓	✓	✓
Life Science and Well-being Campus	Asset Tracking Health IoT Health Ultra-Fast Broadband	✓	X	X	X
Life Science and Well-being Village	Wearables Smart Home Location tracking Analytics Tele-Support	✓	✓	✓	X
Centre in Next Generation Services	Cloud and SaaS 5G Use Case Development IoT Use Case Development	✓	✓	✓	X
Creative Digital Cluster	Media and content Cloud services	✓	X	✓	X
Rural 5G Fixed Wireless Access delivering 'Wireless Fibre' Services	Teleworking Digital Health	✓	X	✓	X
Bay Studios	Media & Content Non-Specific Fast Connectivity	✓	X	✓	X

It should be very much kept in mind that this is an example list and others can and will be added. However, it is a reasonable place to start. It should also be kept in mind that 5G is one enabling digital service, in almost every case Gbs fibre connectivity and IoT services will co-exist and will leverage each-others performance in digital transformation. All of the networks deployed will also be open for other use cases to exploit, they are in no way dedicated to a single project function or service delivery, they remain public-open networks exactly as current 4G networks.

There are also a number of projects that can be IoT led;

Rural Working TechHub - PoC Made as additional to 5G FWA above	Teleworking				
	Digital Sector SME Innovation Digital Sector SME Growth	☐	☐	☐	☐
Internet of Energy	Smart Grid	☐	☐	☐	☐
	Smart Home				
Homes as Power Stations	Smart Grid	☐	☐	☐	☐
	Smart Home				
Factory of the Future	IoT Sensor Array - Specific	☐	☐	☐	☐
	Control - Specific				
	Data exchange - Real Time				

Costs:

Gap funding of between £300k and £500k per project depending on the technology being deployed and assuming match funding from industry for each location. Assuming five core SBCD projects, plus a further ten proof of concepts, a total investment of £7.5m.

Benefits:

Enable supported projects to fully reach their potential while acting as Proof of Concept for 5G and IoT. Accelerating the deployment of 5G and IoT will have a positive impact on inward investment and the growth of digital clusters where it is present. Focus initially on the core SBCD projects to ensure they reach their maximum potential in terms of technology enablement, plus a further ten projects of mixed 5G and IoT within key zones of; manufacturing, transport, energy and health. Assuming match funding, industry would invest £7m. Further potential gains are challenging to define without the inputs of the individual projects.

Issues/Risks:

Each project supported would have its own set of risks and issues that are not dependent on the provision of next generation wireless connectivity. In effect if any project does not have a positive business case for the services it will deliver, the deployment of 5G or IoT services is unlikely to change the position to a positive business case, in which case the digital infrastructure would not be supported and deployed.

Limited financial exposure for SBCD as only deployed against a separate business case

2.4 Economic Appraisal

2.4.1 Summary of long list

A summary of the long list options, possible targets and success measures, costs and economic benefits³⁸ is presented in the following tables:

Rural	Targets/ Measures	Costs over 5 years (2020-25)	Estimated Economic Impact 15y	Key qualitative impacts and benefits
1. Do nothing	-	-	-	
2: Do Minimum <i>Supply Side Engagement</i>	<ul style="list-style-type: none"> Increase commercial inward investment by £5m over 5y Obtain £5-10m from funding applications 	£0.5m	£15m	<ul style="list-style-type: none"> Productivity enhanced Aids start ups Teleworking Household benefits Sustains communities Delivers public services Environmental
3: Do Something <i>Demand stimulation programme</i>	<ul style="list-style-type: none"> Additional 5% uptake in NGA services over 5-year period i.e. approx. 17,000 premises in the region 	£5m	>£15 - 20m	<ul style="list-style-type: none"> Productivity enhanced Aids start ups Teleworking Household benefits Sustains communities Delivers public services Environmental benefits
4: Do Something <i>SBCD Procurement</i>	<ul style="list-style-type: none"> 100% premises connected 4,500 outlying premises 	- £20m	- >£70m	<ul style="list-style-type: none"> Productivity enhanced Aids start ups Teleworking Household benefits Sustains communities Facilitates mobile deployment Delivers public services Environmental benefits
5: Do Something <i>Community Programmes</i>	<ul style="list-style-type: none"> 10 rural community schemes 	<£1m	<£3m	<ul style="list-style-type: none"> Household benefits Sustains communities Delivers public services

Table 27 - Rural Economic Summary

³⁸ See Annex 4 for economic analysis and impact multipliers

Connected Places	Targets/ measures	Costs over 5 years (2020-2025)	Estimated Economic Impact 15y	Key qualitative impacts and benefits
1. Do Nothing	-	-	-	-
2. Do Minimum <i>Supply Side Engagement</i>	<ul style="list-style-type: none"> Increase commercial inward investment by £10m over 5 years Obtain £5-10m from funding applications 	£0.75m	£20m	<ul style="list-style-type: none"> Productivity enhanced Aids start ups Stimulates network build and inward investment Teleworking Household benefits Sustains communities Facilitates mobile deployment Industrial benefits Delivers public services
3. Do Something <i>SBCD Asset Investment</i>	<ul style="list-style-type: none"> Build and upgrade 150-200km of duct infrastructure 	£10m (see note below)	£60m	<ul style="list-style-type: none"> Productivity enhanced Aids start ups Stimulates network build and inward investment Teleworking Household benefits Sustains communities Facilitates mobile deployment Industrial benefits Delivers public services
4: Do Something <i>SBCD procurement</i>	<ul style="list-style-type: none"> Minimum of 281 public sector sites connected 184km of ducts and fibre infrastructure deployed 	£20m (see note below)	>200m (£133m in Swansea City alone)	<ul style="list-style-type: none"> Productivity enhanced Aids start ups Stimulates network build and inward investment Teleworking Household benefits Sustains communities Facilitates mobile deployment Industrial benefits Delivers public services

Table 28 - Connected Places Summary

NOTE; The blend of public sector owned ducts and commercial owned duct investment will be determined in procurement. In option 4 in the table above we estimated the total blended costs of these two options is £20m i.e. if a procurement takes place it will include costs of options 3.

Next Generation Wireless	Targets/ measures	Costs over 5 years (2020-25)	Estimated Economic Impact 15y	Key qualitative impacts and benefits
1. Do Nothing	-	-	-	
2. Do Minimum: Supply side market engagement	<ul style="list-style-type: none"> Increase commercial inward investment by £3m over 3 years 	£0.75m	£3m	<ul style="list-style-type: none"> Stimulates network build and inward investment
3. Do Something: Undertake Future Telecom Infrastructure Review guidance in full & Driving SRN	<ul style="list-style-type: none"> Increase commercial inward investment by £7m over 3 years 	£2.0m	£7m	<ul style="list-style-type: none"> Stimulates network build and inward investment Teleworking Household benefits Sustains communities Facilitates mobile deployment
4. Do Something Funded Intervention to extend 4G coverage to at least parity with other parts of	<ul style="list-style-type: none"> Increased investment by operators to improve coverage, £10m - £30m 	£9m	£10m - £30m	<ul style="list-style-type: none"> Productivity enhanced Stimulates network build and inward investment Teleworking Sustains communities Facilitates mobile deployment
5. Do Something Funded intervention to deliver 5G and IoT connectivity in selected locations	<ul style="list-style-type: none"> Accelerated deployment by operators of 5G and IoT services over the first 5 years 	£7.5m	£13.5m	<ul style="list-style-type: none"> Productivity enhanced Aids start ups Stimulates network build and inward investment Teleworking Household benefits Sustains communities Facilitates mobile deployment Industrial benefits

Table 29 – Next Generation Wireless Summary

It should be noted that many of these options are complementary and should be undertaken as part of a package of interventions for each of the three target market segments.

In addition, options should not be evaluated on total economic impact alone as each option will have different economic and social implications and risks.

In all cases there are significant benefits that are non-quantifiable. The challenge is that all options offer these benefits, other than the do-nothing option. The measure is to what degree the benefits can be achieved rather than there being a fixed differential of the different benefits available. The identification of non-quantifiable benefits is a well-trodden path when considering digital connectivity and services and includes;

- Avoiding isolation and loneliness
- Social inclusion
- Digital inclusion
- Empowering communities
- Access to information sources for social benefits
- Access to a wider market of suppliers and money saving
- Time savings in accessing goods and services
- Entertainment access
- Educational resource access
- Health resource access

2.4.2 Long list to short list criteria assessment

In order to derive a preferred short list of options, each of the long list options has been assessed against the critical success factors for the programme as summarised in Table 18 above.

The table presents each long list option against each of these success factors and colour codes accordingly with green strongly achieving the criteria through to red where there is limited benefit.

Rural Options	Aligned to Strategy	Economic Impact	Achievability	Affordability	Attraction to Supply Chain	Programme Compatibility	Risk	Rank
1. Do Nothing	Poor	Poor	Poor	Good	Poor	Good	Poor	5th
2. Supply Side Engagement	Good	Medium	Good	Good	Medium	Good	Good	2nd
3. Demand Stimulation	Good	Good	Good	Good	Good	Good	Good	1st
4. SBCD Procurement	Good	Good	Medium	Medium	Medium	Medium	Medium	3rd
5. Community Programmes	Good	Poor	Poor	Medium	Poor	Medium	Poor	4th

Connected Places	Aligned to Strategy	Economic Impact	Achievability	Affordability	Attraction to Supply Chain	Programme Compatibility	Risk	Rank
1. Do Nothing	Poor	Poor	Poor	Good	Poor	Good	Poor	4th
2. Supply Side Engagement	Good	Medium	Good	Good	Good	Good	Good	1st
3. SBCD Asset Investment	Good	Good	Good	Good	Medium	Good	Medium	2nd
4. SBCD Procurement	Good	Good	Medium	Good	Medium	Good	Medium	2nd

Next Generation Wireless	Aligned to Strategy	Economic Impact	Achievability	Affordability	Attraction to Supply Chain	Programme Compatibility	Risk	Rank
1. Do Nothing	Poor	Poor	Poor	Poor	Poor	Good	Poor	5th
2. Supply Side Engagement	Good	Poor	Good	Good	Good	Good	Good	1st
3. Undertake 'Future Telecom Infrastructure Review guidance	Good	Medium	Good	Good	Good	Medium	Good	2nd
4. Funded Extension of 4G Coverage	Good	Medium	Medium	Poor	Medium	Medium	Medium	4th
5. Funded Intervention for 5G and IoT deployment	Good	Poor	Good	Good	Good	Good	Medium	3rd

Table 30 - Success Factor Map³⁹

³⁹ See Annex 5 for analysis framework

In order to derive these scores an economic case workshop was held attended by the digital leads from each of the authorities. The scores were discussed, captured and circulated for comment. The analysis in Table 24 presents the consolidated view.

There are a number of key external risks and challenges that could potentially impact the delivery of the proposed SBCD Digital Infrastructure project, these are:

- **State Aid:** It will be time consuming and costly for SBCD to undertake its own state aid application – typically 2 years and several man years of resources. In addition, the process remains uncertain given Brexit. If SBCD wishes to minimise risk in this field, it should:
 - Prioritise demand side measures (e.g. vouchers, demand stimulation) which do not attract state aid issues
 - Undertake rural in-fill procurements working in conjunction with national or regional programmes that have or are obtaining state aid clearance (e.g. Welsh Govt or DCMS Rural Gigabit Connectivity). This also applies to Community led schemes. However, SBCD should retain local control and direction of any intervention
- **Supplier appetite:** Industry is constrained in its capacity and the SBCD is competing with similar measures across the country, including in Wales. The key risks are:
 - Community schemes may attract smaller specialist operators, but there is a risk they do not attract sufficient industry appetite
 - Connected City/ Economic development full fibre projects may be viewed as less attractive outside central urban areas such as Swansea. In this case a blend of Full fibre procurement and public asset investment may be more appropriate
 - 5G Use Case projects are likely to overlap with those being undertaken within the UK and particularly across Wales. It will be necessary to harmonise efforts within Wales to maximise the opportunities of 5G and to benefit from the outcomes of other's Use Cases, particularly where this involves commercial models of intervention
- **UK and Welsh Government Programmes:** Such programmes will part fund and address the challenges the region faces. The key challenges are;
 - Funding and programmes do not materialise in a timely manner
 - Such funding does not fairly reflect the needs of the SBCD region
 - SBCD funding is used in-lieu of funding when other sources are available.
- **Ability to recruit and attract resources** to lead the digital programme and undertake all procurement, stimulation and co-ordination activities. Failure to have such resources would lead to a failure to deliver economic benefits
- **Stakeholder co-ordination** between authorities and other key stakeholders such as Welsh Govt and PSBA could result in delay and increased costs
- Under any heading, **Do-nothing will be in breach of UK and Welsh policy** objectives and commitments at the local authority level, but not SBCD level

These risks will be captured, monitored and reported. A summary of the risks under each of the intervention areas has been described in sections 1.3.6 (Connected Places), 1.4.6 (Rural) and 1.5.6 (Next Generation Wireless)

De-Selected Options

- Do-Nothing is negative in all cases and is therefore not considered further

Rural

- Option 5 is negative on nearly all measures and is therefore rejected

Next Generation Wireless

- Option 2 offers very limited economic impact and is therefore rejected
- Option 4 offers a neutral position and will be provided through SRN

2.4.3 The Preferred Option(s)

Given the above analysis a recommended strategy will consist of the following blend of activities

Rural

- Option 2: Supply side engagement
- Option 3: Demand stimulation programme
- Option 4: SCCD led in-fill procurement BUT only if;
 - State aid compliant
 - Utilising national state aid and procurement programmes but under SBCD financial and operational control

Connected Places/Economic Development

- Blend of Options 3- an investment in public sector owned duct infrastructure and 4, a procurement of commercial owned full fibre infrastructure should be undertaken. The blend of these two options will depend on supplier appetite to be defined in market testing with a total budget of ceiling of £20m

Next Generation Wireless

- Option 3, namely compliance with the guidance provided in the Future Telecoms Review should be executed under a central SBCD mandate and management, but would require the agreement and cooperation of all member authorities. In addition, the provisions of SRN should be a key focus with the aim of ensuring Wales receives the right level of additional coverage and that it is first in the queue for action with at least two mobile operators
- Option 5, selected funded interventions to deliver 5G and IoT connectivity in key locations should be executed under a central SBCD mandate and management

2.4.4 Sensitivity Analysis

Rural

The following sensitivity analysis has been considered

Demand stimulation activities deliver a lower take up of next generation services

In this analysis an industry standard benchmark has been used, demand stimulation delivers a 5% uptake in next generation services over 5 years equating to approximately 17,000 properties delivering an economic benefit of >£100m over 15 years. Hence a failure to deliver each 1% rise in take up results in a reduction in connectivity of 3400 premises and >£20 of economic benefit.

Lack of state aid compatible procurement channels restricts ability of SBCD to undertake in-fill procurement

This would result in an estimated 3-5000 outlying premises being without access to broadband services and an economic loss of approx. £50m over 15 years as well as social and environmental consequences. This cannot be replaced by demand stimulation activities.

Connected Places

The following sensitivity analysis has been considered

Industry unwilling to utilise public sector assets

If there is an unwillingness of industry to use public sector duct assets as a result of commercial or state aid concerns there will be an estimated economic loss of £60m to the region, notably in the development zones outside of central Swansea (e.g. Milford Haven/Pembroke Dock)

Industry only wishing to respond to procurement addressing central Swansea rather than region as a whole

A detailed cost model has been produced showing the costs of required infrastructure investment in each of the connected cities/ development zones areas. This is presented below:

	Length of network	Cost (£)
Carmarthenshire	63.2Km	£5.7m
Neath Port Talbot	42.7Km	£4.1m
Pembrokeshire	17.9Km	£2.1m
Swansea	60.7Km	£5.7m

Table 31 – Fibre Network length & cost

However, it should be noted that Carmarthenshire build is focused on Carmarthen and Cross Hands which are now subject to a BT build programme. This is likely to restrict supplier appetite.

In the event that industry only had the commercial appetite to invest in Swansea the cost would fall to £5.7m, delivering an economic benefit of over £133m over 15 years. This high cost benefit ratio derives from the concentration and density of business in Swansea compared with the other proposed build areas of Pembroke, Milford Haven, Llanelli and Neath/Port Talbot.

Failure of Welsh Govt to deliver trunk road infrastructure

The Welsh Government has developed its own business case for the development of a Trunk Road Network across the SBCD region. This network (if built) would deliver significant economic benefit for the SBCD region as it will enhance inward investment opportunities and facilitate enhanced backhaul for mobile deployment. It would also be complementary to the proposed asset upgrade and full fibre procurement programme.

Next Generation Wireless

The following sensitivity analysis has been considered

Limited industry appetite to deliver 5G and IoT in region

This would result in a loss of investment of between £5-£10m in the region by the operators. It could also impact the deployment by operators of extended 4G and lead to a wireless infrastructure being of lower capacity and speed than that deployed elsewhere in the UK.

SRN allowed to evolve without support or attention from Wales/SBCD region

If SRN is allowed to develop without monitoring or proactively driving an SBCD agenda then it will in every likelihood reach the required Ofcom levels of coverage, but localised issues will be left in the margin. The measure is a percentage for the whole of Wales and there is significant variation in how this might be achieved. This sensitivity is really a lost opportunity

2.4.5 Conclusions

The economic analysis for the digital infrastructure programme scheme has concluded that the most economically viable and beneficial interventions of the three areas of the Digital Infrastructure programme are:

Rural Programme

- A blend of rural options 2 (Supplier engagement) ,3 (Demand stimulation) and 4 (In-fill Procurement) should be undertaken.
- Options 2 and 3 offer a low risk, economic beneficial approach in a deliverable manner.
- In-fill procurement will be dependent on an appropriate procurement channel and state aid but does offer a strong economic impact along with significant qualitative benefits.

Connected Places Programme

- Should be undertaken with a blend of Options 3 (asset investment) and 4 (full fibre procurement) depending on supplier appetite to be defined in market testing.

Next Generation Wireless Programme

- Option 3 should be executed under a central SBCD mandate and management but will require the agreement and cooperation of all member authorities.
- Option 5 should be executed under a central SBCD mandate and management.

A summary of the economic appraisal for each of the three streams within this digital programme is presented in the following table:

	Portfolio	Rural	Connected Places	Next Generation Wireless
A. Economic Impact		£87.5m	£220m	£11.7m
B. Public sector cost (or appropriate value for cost). Note Cost includes total public sector expenditure by SBCE, DCMS and Welsh Government	Note: Additional commercial investment in leveraged by public sector investment	£21.5m	£12.5m	£4.5m
C. Appropriate BCR		3.5	11	1.5
D. Significant unmonetizable costs/benefits		<ul style="list-style-type: none"> • Productivity enhanced • Aids start ups • Teleworking • Household benefits • Sustains communities • Facilitates mobile deployment • Delivers public services • Environmental benefits 	<ul style="list-style-type: none"> • Productivity enhanced • Aids start ups • Stimulates network build and inward investment • Teleworking • Household benefits • Sustains communities • Facilitates mobile deployment • Industrial benefits • Delivers public services 	<ul style="list-style-type: none"> • Stimulates network build and inward investment • Teleworking • Household benefits • Sustains communities • Facilitates mobile deployment • Productivity enhanced • Environmental impacts (e.g. reduced Co2) •
E. Significant unquantifiable factors		<ul style="list-style-type: none"> • Central and Welsh Govt Funding 	<ul style="list-style-type: none"> • Commercial appetite to invest 	<ul style="list-style-type: none"> • Commercial appetite to invest in region

		policy and subsidies • State Aid • Levels and locations of commercial investment • Ofcom regulatory policy	• Role of PSBA • State Aid	•
F. Risk costs by type and residual optimism bias				
G. Switching values (for the preferred option only)				
H. Time horizon and reason		2021 - 2025	2021- 2023	2021 – 2025

Table 32 - Economic Appraisal Summary

A summary of the proposed expenditure under each of these three streams is presented in the table below. The table splits out to what potentially is provided by SBCD along with commercial investment and assumed central government grant funding. It should be noted that commercial investment is likely to emerge in two waves. An initial direct contribution to the proposed programme plan. Then in addition, there will be secondary pull through investment by the commercial sector as subsequent investment will be made to enhance and expand the digital infrastructure facilitated by SBCD. This has been presented in the table below. The key assumptions are as follows:

- In the rural stream Openreach is likely to make an initial contribution of up to 20% of project costs. A subsequent second wave of commercial investment will arise as unserved premises are connected and SBCD demand stimulation activities increase take up and demand. There are currently 20,500 white premises. If the SBCD and DCMS programmes establish FFIB in most of these locations and there is a 30% adoption rate, we can expect around 7000 new FTTP customers. In addition, demand stimulation programmes will increase demand for Openreach products and services across the region. A 5% increase in adoption would lead to around 15-20k new connections.

- In Connected Places experience in cities such as Aberdeen has shown, a multiplier between public and commercial sector investment of >6:1. Hence based on £12m of SBCD investment, commercial contribution of at least >£70m can be expected.

Stream	Proposed Budget	SBCD	Central Funding	Commercial Contribution to Initial Budget	Additional Commercial Pull Through Investment 15 Years
Rural	£25.5m	£8m	£13.5m	£5.0m	>£48m
Connected Places	£20.0m	£12.5m		£9.5m	> £70m
Next Generation Wireless	£9.5m	£4.5m		£6m	>3m
TOTAL	£55.0m	£25.0m	£10.0m	£12.0m	>£120m

Table 33 - Budget & Source outline

A split of this expenditure between revenue and capital for the programmes is shown below

Stream	Proposed Budget	Capital	Revenue over 5 years
Rural	£25.5m	£20.0m	£5.5m
Connected Places	£20.0m	£19.5m	£0.5m
Next Generation Wireless	£9.5m	£7.5m	£2.0m
TOTAL	£55.0m	£47.0m	£8.0m

Table 34 - Revenue & Capital splits

3 Commercial Case

3.1 Background

This section presents the commercial case for the short-listed options. It should be noted that there are a range of commercial choices to be made under each of the proposed workstreams and external factors that shape the commercial choices to be made. The following sections are discussed in turn:

- Potential procurement routes
- Service requirements
- Risk transfer
- Commercial and contractual considerations.

The section concludes with a summary of the key commercial questions faced by SBCD and the dependencies.

Throughout this commercial case frequent references are made to how any intervention will be managed and undertaken by SBCD.

In addition, there are two key external factors that will impact the commercial model chosen; state aid and the roll of PSBA. These are summarised below as background introduction to the analysis.

3.2 State Aid

Through the commercial case frequent mention is made of state aid. As a general principle a public sector body cannot intervene in the digital marketplace unless clear market failure can be demonstrated.

In the case of next generation broadband services, it must be demonstrated that there is no commercial service available to a commercial or business premise and this must be demonstrated by asking suppliers through a consultation process what their existing and planned (over a 3-year period) infrastructure is to be. State aid clearance is then obtained at an EU level and administered by BDUK. This approach has been used by Welsh Govt for Superfast Cymru. Typically, a state aid clearance of such nature takes 1-2 years to obtain. If a further intervention is required in the same areas for a further upgrades of infrastructure (e.g. to increase speed or capacity) a further clearance is obtained. **This is relevant to the rural stream**

An alternative intervention approach is for the public sector to procure infrastructure and services to serve its *own sites only*. This may, as a consequence, serve to anchor investment in the region by a commercial operator as the public sector contracts stimulates inward investment and reduces commercial risk. This is the approach being undertaken by other regions under the DCMS LFFN programme. DCMS has not made a Notification to the EU Commission and so BDUK does not have any delegated authority. This means that it is a matter for SBCD to confirm that they are working within the State aid regulations and to deliver projects through "no aid" routes. The DCMS assessment is that the purchase of gigabit capable connections by public bodies, either

as an aggregated, regional approach or for individual sites is 'no aid' on the basis that it is not market distorting, as long as the public bodies only buy what they need. **This is the approach that would need to be adopted under the Connected Places stream.**

The final relevant scenario is if the SBCD wish to upgrade assets such as ducts and makes these available to the market. Here the approach is to demonstrate 'no aid' through the Market Economy Operating Principle (MEOP). The State Aid regulations treat the delivery of goods or services by the public, or private sector organisations in the same way. The MEOP provides a mechanism to demonstrate whether there is a market distorting effect from a public sector organisation delivering goods or services. If there is not a distorting effect, there is no State aid. For Public Sector Assets expansion and upgrade SBCD must be able to demonstrate through the MEOP principle that there is no aid and that the project is a genuine investment, including clearly demonstrating risks and profits and market-based pricing.

The above principles shape the commercial and ownership model that can be used.

3.3 PSBA

The Public Sector Broadband Aggregation (PSBA) is a managed network that connects public sector organisations in Wales to a private secure Information and Communications Technology (ICT) Wide Area Network (WAN).

It is highly desirable that all rural and connected cities interventions are complementary to the PSBA to ensure that public sector sites continue to receive services. In addition, the PSBA effectively acts as a channel for the local authorities to easily procure connectivity services.

In the case of rural public sector sites, the PSBA is already working closely with Openreach and a number of Welsh Authorities to ensure that any full fibre upgrade to rural sites can be procured through the PSBA. This eliminates the need for SBCD to undertake a procurement for its public sector site connectivity. Pembrokeshire has been working alongside PSBA on this matter.

The situation in the Connected Places is more complex. In the Connected Places, SBCD has a choice between;

- Procuring a managed gigabit service to its sites. This could be procured through PSBA
- Procuring a new dark fibre or equivalent infrastructure in the footprint of the Connected Places over which PSBA (and others) could deliver services.

The usage of dark fibre network infrastructure sits outside the existing PSBA product set and as well as its commercial supplier BT. As a result, the PSBA will have to light any dark fibre procured in the Connected Places stream and deliver its service wrap over a third-party network infrastructure provider with whom it does not a commercial and operational relationship. This is a bespoke deployment by PSBA and involves additional costs in terms of equipment, design and programme management. Although achievable, experience in CCRCDC has shown that it is slow and adds cost. It is however necessary if the SBCD commercial strategy is to widen choice at the infrastructure level.

3.4 Procurement Strategy

3.4.1 Background

A sub-set of the recommended shortlisted options will require the conduct of a procurement of assets and/or services. These are:

- Rural: Option 4; SBCD led in-fill procurement
- Connected Places: Options 3 (asset upgrade) and 4 (infrastructure procurement)

All will need to be undertaken in accordance with public sector procurement regulations and be fully compliant with relevant state aid regulations.

All procurements must be undertaken within the current procurement standards operated by the Local Authorities and other partners involved in the SBCD and be

aligned to overarching SBCD Procurement Principles. The procuring party will be specific to the procurement exercise and agreement by the Digital Infrastructure Board and / or Joint Committee as appropriate.

The chosen procurement strategies must take into account existing contractual arrangements and the role of the Welsh Government and the Public Sector Broadband Aggregation (PSBA). It is used by all authorities in the region from which they source connectivity services and a service wrap (note there are a small number of sites not sourced from PSBA). It is desirable that any new infrastructure or services procured are either via the PSBA or through a third-party infrastructure provider over which the PSBA is able to provide existing services to the local authorities.

The scope and services for each of the three main areas of the Digital Infrastructure project are different and will be carried out within a different environment of other intervention actions by the UK and Welsh Governments. To this end, each heading is treated separately.

3.4.2 Rural Connectivity

- Preferred Option 2 - Supply Side engagement
- Preferred Option 3 - Demand Stimulation programme
- Preferred Option 4 - SBCD led in-fill procurement

Options 2 and 3 represent an **internal team** providing support services, possibly with some external professional support. This does not require procurement.

Option 4 represents a procurement activity of some form.

Option 4 - SBCD led In-fill procurement

The procurement is the provision of connectivity to residential and commercial premises with no, or poor, internet access. All of the exact locations to be reached are to be specified within each procurement action, as well as the level of service⁴⁰ to be provided.

The actual procurement is complex due to state-aid issues. State aid clearance is required for each market intervention by the public sector at any given step change in technology. Currently there is a national state aid clearance for the provision of broadband services in accordance with the EU Broadband Guidelines (<https://www.gov.uk/government/publications/state-aid-eu-guidelines-for-the-application-of-state-aid-rules>). Obtaining a state aid clearance at a City Deal or authority level is NOT recommended due to timescales involved (typically 1-2 years), cost, replication of national clearances and Brexit uncertainties.

On this basis, the optimum procurement path is through the use of other existing procurement facilities, but against an SBCD provided scope. Several options may be available, including working through Welsh Government procurement channels and UK

⁴⁰ Service should be defined as a minimum Mbs

USO programme⁴¹. The procurement is further complicated by the fact that the SBCD scope cannot be fully determined until such time as the next phase of Superfast Cymru is identified and the processes that underpin the UK USO are known.

SBCD must be allowed to specify the locations and service level to be provided for each premise for any other funding mechanism that might be available.

Possible state aid compliant procurement routes currently open to SBCD are:

- PSBA; This can be used for connection of the public sector estate in rural areas and PSBA is already in discussions with some of the local authorities in the region on this matter. (Note; If SBCD is successful in obtaining funding from the DCMS Rural Gigabit Connectivity Programme which seeks to drive fibre into public sector hubs in rural locations the PSBA can be used for delivery under this programme)
- Welsh Government Dynamic Purchasing System; For clarity it is NOT proposed that SBCD simply top-up the funding to subsequent Superfast Cymru waves as local control and prioritisation will be lost. However, the Welsh Govt is considering establishing a Dynamic Purchasing System whereby the region can call off its requirements from an approved list of suppliers under the shelter of a national state aid clearance. At the time of writing this scheme is yet to be finalised but SBCD should liaise with Welsh Govt on this matter to ensure its technical and commercial requirements are addressed in the design of the scheme
- DCMS USO channels; It is recommended that discussions are begun immediately with the DCMS to ascertain the best way for interaction. If at all possible, SBCD should take control of the funding and delivery of the USO in the region, and top-up individual connections where they exceed the £3,400 cap. This will introduce a local knowledge capability that a national scheme could not hope to fulfil. It would also allow more effective aggregation of the fee for each connection, sharing some of the costs to provide main fibre bearers into an area. This approach would also open the market for provision to smaller Alt-Net providers who may well agree to recruit from the local population for construction and on-going service support.

3.4.3 Connected Places

Option 3 – Infrastructure asset investment

Under this scenario SBCD fund the expansion and upgrade of public sector ducting within the region. The following points should be noted:

- Any ducting built or upgraded with public sector funding must be used by the authorities for their own use and the delivery of public sector services – it cannot be built purely for commercial objectives
- Any spare duct capacity can subsequently be offered to the commercial market to lower its costs of deploying fibre infrastructure in the region. However, this must be at benchmarked market prices and open access. Any investment in ducting which is subsequently offered to the market is subject to state aid and SBCD will

⁴¹ Announced but yet to be put in place.

need to ensure compliance. The approach is to demonstrate ‘no aid’ through a Market Economy Operating Principle (MEOP). The MEOP provides a mechanism to demonstrate whether there is a market distorting effect from a public sector organisation delivering goods or services. If there is not a distorting effect, there is no state aid. SBCD must be able to demonstrate through the MEOP principle that there is no aid and that the project is a genuinely commercial investment, including clearly demonstrating risks and profits and market-based pricing. In practice this requires SBCD commissioning a state aid lawyer or auditing company to prepare a report on the investment undertaken and express formal advice that there is no aid.

- With the exception of central Swansea, authorities have indicated there is limited ducting in the region that is suitable for fibre deployment.

Any duct infrastructure built must be for public sector use, linking property or street assets.

In terms of procurement planning SBCD will need to segment the initial design and build of duct infrastructure from any subsequent operation.

Initial design and build of ducting are typically undertaken by the preferred highways contractor of each of the respective authorities. This can be procured using existing frameworks and contracts but under an agreed, common, commercial grade duct specification

The planning and permissions required from local authorities to build the duct network should wherever possible be put in place prior to the tender process to give certainty to the bidders and allow a fast start to the work.

Upon building of the duct there will be a requirement to facilitate the opening of the ducts to commercial operators. There are effectively three commercial models to do this:

- A concession (e.g. Welsh Govt Trunk Road Network)
- A Co-Op (e.g. Tameside Council)
- An open model (e.g. Aberdeen City Council)

A fuller description and the merits of each approach are described in the enclosed link (<https://www.gov.uk/guidance/commercial-models>)

From a procurement perspective an open model is the simplest to undertake. In contrast a concession will require a full OJEU procurement process, usually under the Open or CPN procedures. A Co-Operative involves the transfer of duct assets into a co-operative venture which can be time consuming in terms of establishing the entity, its governance, establishment of operational contracts and asset transfer.

Option 4: Procurement of infrastructure and/or managed service

Under this Option the SBCD authorities procure either:

- Infrastructure; Notably the build and use of dark fibre (or an equivalent wavelength service) to a defined portfolio of public sector sites
- A Managed Service; Gigabit capable connectivity to sites.

This procurement will represent a service driven approach; whereby specific locations⁴² are to be provided with a service rather than a specified physical network connection. The manner in which the service is provided will have some limitations placed upon it, but in general it is left to the supplier to provide the service through their selection of the most appropriate network connectivity.

a) Infrastructure procurement

If SBCD wishes to procure digital infrastructure it is typical to undertake an OJEU procurement (although some authorities have attempted to use existing frameworks' such as SWAN, YHPSN etc but these are typically limited in terms of their flexibility and suitability for an infrastructure procurement). A list of mandatory (and potential optional sites) are defined along with a proposed budgetary ceiling.

The cost, timescales and complexity of such a procurement process means that it would be beneficial to undertake this on a pan SBCD level led either by the City Deal or an agreed lead authority.

There are two approaches that can be undertaken;

- Establishment of an SBCD framework contract from which the authorities (and potentially other public sector bodies in the region) can call off as and when required. This maintains a higher degree of control at the authority level but is a two-stage procurement process. This is illustrated in Figure 1 below
- A one-off pan-regional procurement (possibly with regional lots). This is quicker but more centralised and is being used by Greater Manchester Combined Authority. It also constrains future public sector aggregation as bodies not party to the initial procurement cannot subsequently participate.

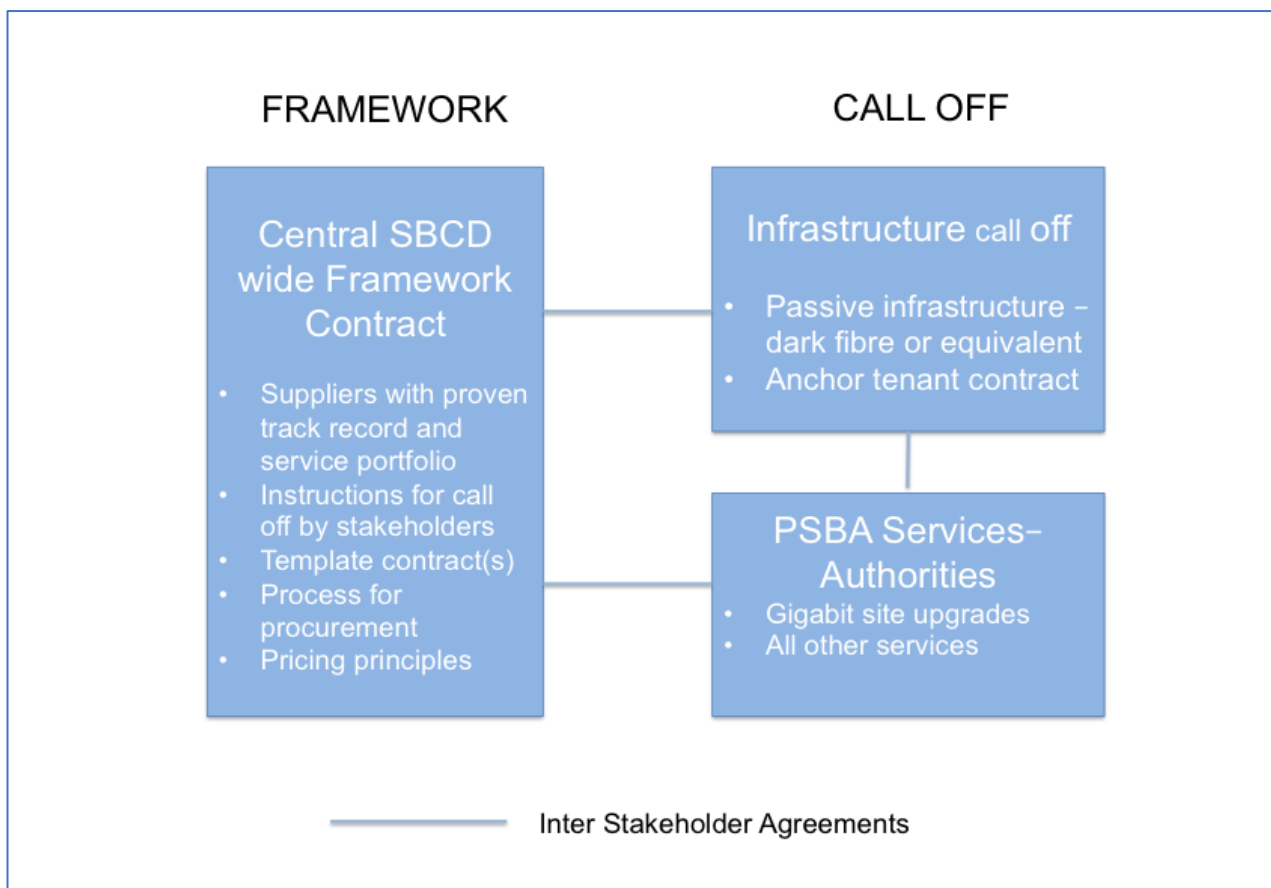
Under the framework approach, a central framework will be procured by SBCD on behalf the participating stakeholders. Points to note about this central framework are as follows:

- Suppliers will be placed on the framework following a competitive process – possibly using an Open Procedure
- Suppliers must have demonstrated a track record and capability to deliver at least one of the following services; dark fibre, Gigabit capable connectivity, additional services.
- The framework will include a template contract
- It will include instructions on how to call off
- Although pricing will be bespoke for each call off based on local requirements, the framework will specify high level pricing principles to ensure value for money. This will include benchmarking.

⁴² Locations are public sector locations which represent an anchor customer for services

- Each authority or groups of authorities will then define a call off contract based on their individual service needs, coverage and budgets.
- Each authority sources a service wrap from PSBA who delivers services over the new infrastructure
- There will be inter-stakeholder legal and financial agreements between all respective purchasing bodies as appropriate across this structure.

Figure 12 - Procurement Framework



The alternative approach is a single procurement for agreed coverage across the region as a one-off. This will be quicker but will prevent further call-off actions at a later stage, including other public sector bodies in the region aggregating their requirements and connectivity spend.

Under either procurement approach it is likely that new ducting and fibre will be built across the region. ***The key commercial question is the ownership of this duct and fibre asset and whether it is in the public sector or commercial sector. This will need to be specified in the procurement as it will shape the commercial model and evaluation criteria.***

The table below summarises the merits of each approach;

Benefits	Ownership of ducts/fibre	Challenges
Public sector	Public sector owns an asset in return for its investment Scope to use to deliver other public sector services Potential for a revenue stream to recoup initial investment	Public sector unable to expand reach to commercial and residential market unless assets moved to commercially viable SPV Public sector responsible for operations, SLAs, sales etc Access to capital for future expansion Transfer of public assets into a new vehicle such as a co-op or SPV? Supplier appetite toward use of state-owned infrastructure may be limited
Commercial sector	Commercial sector owns assets but gives public sector an IRU in return for capital investment Likely to lower authority's revenue spend on connectivity No state aid constraints on expansion of network to commercial and residential areas	Public sector does not control coverage and reach Risk commercial parties will concentrate on limited number of high value commercial areas.

Table 35 - Ownership Models

Effectively there is a risk reward trade-off for SBCD, a commercially led approach reduces state aid and operational risk but does not deliver a revenue stream or asset to the public sector. Much depends on the motivation for the procurement. If driven by a desire for inward investment and connectivity to businesses and resident's commercial ownership tends to be favoured. If driven by a desire for the public sector to have an asset and a revenue stream, public sector ownership is favoured. To meet the SBCD core strategic objectives, the former is recommended.

However, there is not a consensus across the country on this matter. Both approaches deliver connectivity to the public sector estate and much depends on political priorities. Cities that have sought to maximise commercial inward investment into their region to serve businesses and residents have tended to favour an IRU on a commercial asset. These include Peterborough, Aberdeen, Newport and York. In contrast other have

favoured public ownership for political and social reasons and to generate an income stream. These include Bristol, Mid Sussex and Liverpool.

It should also be noted that some bidders may also be willing to take on risk, building some of the network and providing services at their own cost. Risk appetite will be reflected in the overall cost.

As part of the economic case the estimated build cost of Options 3/4 across the key connected Places of the region was £17m. It is likely that this cost would not be fully carried by the public sector as the winning tenderer would be able to use the infrastructure for commercial use. A key element of the procurement process could be to score the level of contribution offered by the commercial sector in the selection of the winner. A further variation should be allowed. Bidders can explicitly show their risk appetite by committing to building and offering services across a wider footprint than that specified in the tender. A wider build-out at their cost would represent an inward investment. The weighting for this would need to be determined during the tender process.

The sources of capital funds from the public sector is typically derived from a blend of three sources;

- SBCD funds
- Other DCMS funding streams (e.g. LFFN)
- A local contribution by the authority.

In the latter case, authorities have looked at their on-going expenditure on connectivity services over a period of say 15-20 years. A percentage of this has then been capitalised to fund the building of a dark fibre network over which they will have a right to use. By using the IRU on a dedicated dark fibre savings can be made on an on-going basis as there will be a reduced requirement to procure circuits. As an illustrative example the Cardiff region analysed its PSBA costs across a time period. These costs are actually a blend of circuit cost with BT and a service wrap and management fee. PSBA provided this breakdown. It assumes that there is still a need to pay for the service wrap and management fee along with one-off costs for equipment upgrades and interest charges. However, there was a saving in circuit expenditure by migrating to an IRU approach and hence spend was migrated from the revenue account to the capital account to fund the initial build. This approach has also been used around the country by bodies such as Greater Manchester Combined Authority.

b) Managed Service Procurement

Under this approach SBCD authorities procure a gigabit cable managed service. This in turn will drive investment in fibre within the chosen footprint.

Under this approach services would be procured directly from PSBA without the need for a further procurement.

3.4.4 Next Generation Wireless

Option 3 – Undertake Future Telecom Infrastructure Review guidance in full & Drive SRN

There is no direct procurement action necessary.

The action will require the set-up and recruitment of a dedicated specialist team to provide, on behalf of the four local authorities, a service in line with that proposed in the Future Telecoms Infrastructure Review, (FTIR). A team of five is thought sufficient, provided each authority provides a single point of contact through which to deliver the streamlined services as proposed in the FTIR.

Due to the specialised nature of the staff, it is recommended that an external agency is used to identify internal and external candidates and to negotiate their selection and recruitment.

Option 5 – Funded intervention to deliver 5G and IoT connectivity in selected locations

It is considered that the team brought together for Option 3 will also be able to provide the additional support necessary to execute Option 5.

Procurement will be undertaken in respect of a project by project requirement, covering one, or a combination of two actions;

- 5G coverage and services
- IoT coverage and services

The only source for providing such coverage and services are the existing mobile operators and a few specialist 5G neutral host providers. For IoT services there are a number of IoT specialists, including ones that utilise semi-proprietary standards such as LoRaWAN.

Several options exist for securing 5G coverage and services, some of which are being explored in CCRC and under the Wales RCC programme. As a first step, it is suggested that a dialogue is undertaken with interested parties. This may best be done through a formal market engagement using an RFI, seeking to gauge market interest and to establish direct contact with those CSP's interested and capable of deploying 5G services that match the use cases envisaged. It is likely that there will be a need to conduct one-to-one briefings of the CSPs to discuss the options. It is not recommended to have a single supplier briefing as there are different commercial options that bidders may choose to offer.

An important note is that any network coverage and services deployed through SBCD intervention or partnership would be open to the public and businesses to use, they would not be limited to the specifics of any one use case project. In this way, the benefits associated with the services being made available will be spread across a wide range of topics.

The specification that will be provided to the CSPs is simply the geographic coverage required and the type of service needed to support the intended use cases. CSPs may respond in several ways;

1. Where the coverage request intersects with the operator's own coverage plans and meets their own investment criteria, then a timetable can be agreed, with adjustments made to this depending on willingness to cooperate. In effect this would be an acceleration of commercial deployment by one or more CSPs and would represent a near zero cost to SBCD.
2. Where the coverage request is not in the CSPs current one-year planning horizon, then an accelerated timetable can be agreed, with adjustments made to this depending on willingness to cooperate. This is again an acceleration of deployment but may involve some level of commitment to purchase service in the coverage area. Again, this would represent a zero cost to SBCD, but the project use cases being supported will need to give a commitment to purchase services at a defined level and over a period of time. This might be particularly suited to IoT networks.
3. Where the coverage request is not in the CSPs current one-year planning horizon and there is no commercial justifiable cause to accelerate deployment, then proposals can be invited from the CSPs to identify their individual *risk increment* in providing the coverage requested.
 - a. The *risk increment* is the amount of co-investment they would need to have from SBCD in order to cover their losses over the initial three-year operational period, after which time the risk increment is ended and no further support is offered. This is in effect, assisting the CSP to establish a customer base within a fixed window, continuation of the service beyond this window is at risk, but it is highly unlikely than a CSP would cease services as the cost of removing the equipment would be prohibitive as would the public response.
 - b. Different CSPs will have a different view of the risk increment, depending on their five-year horizon for coverage in the identified geographic area. The lowest *risk increment* would then be agreed with one or more CSPs that can achieve immediate deployment and service offering
 - c. The project benefiting from the coverage would then be able to proceed and the SBCD team promote further use of the network coverage being provided for new use cases and further innovation
 - d. Chosen CSPs would also be expected to promote the service and maximise usage and thereby their own direct revenue. Should the revenue being gained by the operator in the coverage area reach an agreed level during the three-year period when the *risk increment* is being paid, then the payment will stop immediately
 - e. A mechanism will also be included by which the *risk increment* paid can be recovered on a quarterly basis should the coverage deployed exceed a level of agreed usage, (revenue), this would be reflecting a now profitable deployment, (i.e. the risk perceived at deployment did not materialise or ended sooner than anticipated through stronger user uptake).

The procurement is therefore a process undertaken on a use case project by project basis, with different SBCD cost and payment arrangements depending on the risk the

deployment represents. The procurement would also be treated as an investment with the potential for successful deployments returning the investment made by SBCD.

As there are significant numbers of variables in play, it will not be possible to specify the costs until there has been engagement with the operators on the specifics of the use case projects; service need, geographical coverage area and the wider market opportunity that the coverage might represent. An average risk increment per project has been calculated at £450,000⁴³ over a three-year period.

A single set of template requirements documents and contractual framework should be developed and used for all deployments. These documents will be novel.

The procurement itself should be in the form of a framework agreement for the supply of network coverage. Within the framework, there will be provision to run mini-competitions against each project's needs. The basis of the framework award will be on capability and willingness to accept the structure of a risk increment approach and in providing a return on the SBCD investments, made against set pre-determined success criteria. The risk increment value will be allowed to vary between 0% and 80%⁴⁴ of the total deployment and service provision cost.

It is not anticipated that there should or would be a case where the risk increment is 100%. This would represent a severe challenge to the CSP's own business case and indicate it is thought likely by the CSP to fail.

3.5 Service Requirement

3.5.1 Rural Connectivity

Option 2 and 3

There is no procurement under Options 2 and 3 and therefore no service requirement⁴⁵.

Option 4

Option 4 will involve a procurement. The service requirement will consist of;

- Specified locations at which a defined service is to be delivered⁴⁶. It will be essential to identify target premises and locations in order to scope the requirement and satisfy state aid requirements (Note; a given area is not allowed to receive aid from two intervention programmes given a comparable technical

⁴³ 5G projects would represent this figure, while IoT would be lower. An average has been used here.

⁴⁴ 80% is given as an upper bound to ensure some risk is taken by the CSP and some investment is made. The selection of projects will affect the risk increment applied.

⁴⁵ The management case will outline the internal organisation and services that are to be provided

⁴⁶ Service to be defined as an internet access speed

solution. Hence any area addressed by an SBCD intervention would need to be ring-fenced from Welsh Govt or DCMS interventions).

- Minimum download and upload speeds to be provided⁴⁷. It should be noted that Superfast Cymru 2 (and other interventions such as R100 in Scotland) have specified either 24Mbps or 50 Mbps as minimum download speeds whereas the USO is 10 Mbps. Experience has shown that a rigid adherence to a single technical solution or speed is often unobtainable if reach is to be maximised and a blended approach of technologies and speed targets may be more appropriate⁴⁸.
- If procured through another funding intervention such as the Welsh Government Dynamic Purchasing System, there will be a series of operational, performance and financial guarantees.

3.5.2 Connected Places

Option 3

Construction of communications ducting to Telco standards, (carrier grade), to specified locations. Working to the appropriate UK standards, the duct work must be suitable for any service provider to lay and operate new fibre connections, given adherence to SBCD technical and operational policies governing duct access and maintenance.

Primary supplier(s) would be Civil Engineers and Telecom operators

Option 4

It is envisaged that the framework procurement will specify three services. Suppliers will be expected to offer one or more of these product sets but not necessarily the full set:

- Dark fibre or virtual dark fibre connectivity to sites: This will be defined as dark fibre tails between a site and an agreed point of presence. Such fibre will be used by stakeholders or their service provider. This dark fibre will provide the optimum level of scalability and future proofing over such a long investment period (minimum 20-year period Indefeasible Right of Use – IRU)
- Gigabit Connectivity: Suppliers should offer Gigabit capable services to sites. These will be active services as delivered by PSBA
- Other Services: Stakeholders may choose to procure other services from framework suppliers. These may include active wide area services, IT services, consultancy, mobility solutions etc.

⁴⁷ The requirement for premises to have fibre connectivity by 2033 may require a level of future need to be accommodated

⁴⁸ A balance will be drawn at the time of procurement to ensure a sufficient level of futureproofing is included

3.5.3 Next Generation Wireless

In terms of the Digital Infrastructure, the service requirement is simply the provision of 3gpp standard coverage for 5G services over a specified area⁴⁹. The specific requirements of what use the wireless connectivity will be used for is held within each specific use case. In many cases, even within the projects, generic services will be deployed by utilising the mobile networks, for instance, ultra-fast mobile broadband. All wireless networks are by their nature, open access, that is, any service can be operated over them, by any application provider⁵⁰.

Within the 5G ecosystem, there are requirements to support ultra-low latency, that is extremely fast response times as might be needed by smart/autonomous vehicles, ultra-fast speeds (>300Mbps to mobile devices) and vast numbers of IoT devices. Some of this is represented by edge computing and extremely high bandwidth connections in mm band spectrum, it is felt that the use cases being considered will not be at the leading edge of research in these areas, but more direct application of fast mobile data. Each use case once developed may have some enhanced requirements, but these should be dealt with as they emerge.

For IoT networks, there are several semi-proprietary solutions. However, it is highly recommended that any IoT use cases are deployed utilising the 4G or 5G network services in order to maximise the Open Access nature of SBCD interventions and support the emerging 5G/IoT ecosystems.

3.6 Risk Transfer

Across all the intervention types within Digital Infrastructure there are operational or deployment risks. If any of the assets remain within the public sector elements, these risks will remain with SBCD or the authorities.

Where SBCD is to deploy a team to provide interfaces or support to the public, SMEs and operators, then the risks associated with these team's performance reside with SBCD. An alternative does exist in the form of a Special Purpose Vehicle, (SPV), – InfraCo⁵¹. In this case the risks associated with coordinating local authorities' actions to meet the FTIR, procurement of services and demand stimulation can be placed within a single commercial entity, potentially wholly owned by the public sector. Such an option has strong merits and should be considered, provided it can;

- Operate in an autonomous manner to make faster decision
- Provide the centralised functions necessary and achieve scale efficiency
- Have sufficient delegated powers from Local Authorities and SBCD

⁴⁹ The specification may define the ability to access the mobile network indoors as well as outdoors. In some cases, it might be necessary to define the signal strength that the network will deliver

⁵⁰ There are some uses which Ofcom or operators would not permit, but they are not ones envisaged by the projects being supported

⁵¹ InfraCo and CommunityCo described in further detail in the Management Case

The risk profile of all the options selected are relatively low. The table below shows the overall risks, how they are allocated and whether they are high or low respectively under a Red/Amber/Green indication.

Risk Transfer

Rural	Design Risk	Construction Risk	Operational Risk	Technology Risk	Commercial Risk	Residual Value Risk	Reputational Risk
Option 2	None	None	None	None	SBCD	None	SBCD
Option 3	None	None	None	None	SBCD	None	SBCD
Option 4	None	None	None	SBCD	SBCD	SBCD	SBCD

Connected Places	Design Risk	Construction Risk	Operational Risk	Technology Risk	Commercial Risk	Residual Value Risk	Reputational Risk
Option 3	None	None	None	None	SBCD	SBCD	SBCD
Option 4	None	None	None	None	Shared	Shared	Shared

Next Gen Wireless	Design Risk	Construction Risk	Operational Risk	Technology Risk	Commercial Risk	Residual Value Risk	Reputational Risk
Option 3	None	None	None	None	None	None	None
Option 5	None	None	None	Shared	Shared	Shared	Shared

Table 36 - Risk Profiles

The highest risk with the lowest risk transfer is option 3, under Connected Places. The rationale for this, is that the duct to be commissioned and built will have no certainty of being utilised for fibre distribution and thereby services being offered which equates to Commercial Risk, Residual Value risk and Reputation risk. Likewise, should there be a poor uptake, the reputational risk for SBCD would be high in terms of an investment that failed to achieve its objectives.

3.7 Key Contractual Arrangements

3.7.1 Rural Connectivity

Option 2 and 3

No contractual arrangements are needed.

Option 4 - SBCD led procurement to In-fill un-served or poorly served locations

If SBCD utilises an established procurement route (e.g. Welsh Government Dynamic Purchasing System) it will call off from an approved list of suppliers and service specification. In this case requirements will be defined in terms of local SBCD priorities for service roll out, target areas and timescales. These may include;

- Specified locations to be connected within available budget and timescale
- Compliance of roll out to SBCD defined priorities
- Performance guarantees (speeds, availability etc)
- Technology to be used

- Initial Award Payment and then payment by connection completed.
- SLAs to cover initial services and commitment to improve services
- Fixed period of two years in which to complete the work⁵²
- Investment recovery mechanism where revenues become greater than cost, operating for a period of 'n' years after completion⁵³
- Single lump sum price
- Single prime supplier.

3.7.2 Connected Places

Preferred Option 3

A distinction needs to be made between the initial duct build and the on-going commercialisation of the assets.

It is presumed that the initial build of ducts will be undertaken with an existing supplier of highways infrastructure and under an existing agreed contract. Key issues to be defined are;

- Specified public sector sites to be connected by duct.
- Built to Telco industry standards
- Compliance to health and safety regulations
- Initial Award Payment and then payment by build milestone completed.
- Warranty period of at least fifteen years for passive infrastructure.
- Target period of two years in which to complete the work?⁵⁴
- Single lump sum price for passive infrastructure
- Single prime contractor
- On-going maintenance and support.

The on-going operation and commercialisation will be undertaken under an open contract, concession or SPV/Co-Op. In all cases the key contractual considerations are as follows:

- Coverage; what will be offered to the market and where?
- Service specification
- Term (typically a minimum of ten years)
- Exclusivity rights
- Assets to be used
- Termination procedures
- Health and safety compliance
- State aid compliance

⁵² Timescales to be determined

⁵³ The period over which a clawback mechanism can work is yet to be determined

⁵⁴ Timescale to be determined

- Operations (including customer service, service management, project team, project management, project delivery, interworking with SBCD and term contractor)
- Reporting
- Installation
- Adherence to planning
- Community benefits (e.g. local employment)
- Commercial arrangements including potential assets rental fees to authorities and proposed revenue share arrangements.

Preferred Option 4 – Infrastructure or Managed Service Procurement

If an infrastructure procurement is undertaken, any framework contract is typically awarded based on service portfolio and track record along with pricing principles. Detailed specification, evaluation and contractual negotiations occur at the call-off level and should include the following issues:

- Locations to be connected by fibre. Typically, a mandatory list of sites to be connected within a budget ceiling is stated along with additional desirable sites with suppliers scoring higher for wider coverage
- Term length; Tenderers increase their evaluation scores for a longer IRU length
- Level of financial contribution to build costs by tenderer
- On-going operation and support / maintenance processes and costs
- Overall technical design and solution; PoPs, resilience, routes, capacity, use of existing infrastructure, dimensioning, interface to WAN supplier
- Open access
- Future proof and upgrade plans
- Optional service provided
- Compliance to regulations and standards
- Health and safety
- Testing
- Programme of works including street works and interface with local bodies
- Environmental and social considerations.

Any Managed Service contract would be sourced from PSBA under existing contractual and procurement terms.

3.7.3 Next Generation Wireless

Option 3 – Undertake Future Telecom Infrastructure Review guidance in full & Drive SRN

None applicable.

Option 5 – Funded intervention to deliver 5G and IoT connectivity in selected locations

The key contractual components should be;

- Framework agreement with all or some of the mobile operators and other neutral host operators able to provide the service

- The requirement will be set out as a service defined coverage in a geographical area
- Service levels will be set, such as good indoor coverage and minimum data speeds
- An upper limit on the risk increment should be set at 80% of the operator's cost of deployment
- Where it is necessary for new infrastructure to be built, use of infrastructure assets owned and controlled by the public sector should have a favoured-nation status and be utilised at commercial rates whenever they are suitable
- The fair market cost of using public sector infrastructure can be used as an offset within the risk increment
- The risk increment funding should be structured as an investment and is provided to **accelerate** the deployment of 5G coverage rather than specifically purchasing a service
- Any supported deployment must be open access, that is other services and users can make use of the network at the standard national service rate or its equivalent
- A threshold should be set against which the success of the deployment is measured. The measure can be revenue generated or throughput of data. Once the threshold is reached a return should be made on the investment represented by the risk increment
- Risk increments will be paid on a quarterly basis for a maximum of 3 years
- Returns upon success will be paid quarterly over 6 years from service commencement to the maximum of the total risk increment invested by SBCD

3.8 Summary and Key Commercial Considerations

3.8.1 Key commercial questions

With the chosen short-listed options, there are a number of options in terms of procurement, delivery model and ownership.

Each of these decisions are dependent on both internal factors such as budgets, resources, existing contracts and political preferences and external dependencies such as national and regional programmes and state aid.

A Digital Infrastructure team will work with regional partners through the governance arrangements outlined in the management case to determine the appropriate approach.

Rural Issues	Key dependencies
<p>How should an SBCD rural in-fill procurement be defined and undertaken?</p> <ul style="list-style-type: none"> • What is the service specification? • What is the reach? 	<p>Number of un-served premises</p> <p>Effectiveness of complementary programmes</p> <p>State aid compliance</p> <p>Availability of suitable procurement route</p> <p>Budget</p>
<p>Would SBCD offer loans to commercial players to stimulate inward investment (see section below)</p>	<p>Industry appetite</p> <p>Need for careful due diligence and on-going governance</p> <p>State aid compliance</p> <p>Budget</p>
Connected Places	
<p>What is the desire to invest in public sector assets (e.g. ducting)?</p>	<p>Willingness of SBCD authorities to use new ducting</p> <p>Appetite of commercial bodies to use public sector owned ducting</p> <p>State aid challenges</p>
<p>What is the scope of the procurement for commercial full fibre services in the region?</p>	<p>Available budget</p> <p>Integration with PSBA</p>

<ul style="list-style-type: none"> • Infrastructure or managed service? • Geographic coverage? • SBCD framework or one-off procurement? 	<p>Integration with WAN and other contracts</p> <p>Supplier appetite to invest in region</p> <p>State aid</p>
<p>What is the level of commercial risk/reward that SBCD wishes to take?</p>	<p>Is the key motivation for the procurement to;</p> <ul style="list-style-type: none"> • Enhance public sector connectivity? • Deliver additionality i.e. connectivity to businesses and residents in the region • Generate revenue and value?
<p>Next Generation Wireless</p>	
<p>Selection of projects to be supported with coverage</p>	<p>SBCD core projects such as the Wellness Village and Milford Haven being supportive of the need for digital infrastructure a thorough review of the SBCD projects and any initiatives related to 5G within each partner local authority should be undertaken to select the most appropriate Use Cases. There may be a case to harmonise with CCRCD and RCC use cases.</p>
<p>Service types to be deployed</p>	<p>Appetite of CSPs to engage and support the use cases and the coverage areas proposed</p>
<p>Level of risk increment that is acceptable to SBCD</p>	<p>Funding structure to be applied</p>

Table 37 - Commercial Issues

3.8.2 SBCD Financial Support

Some City Deals elsewhere in the UK have moved away from the concept of GAP funding towards an investment driven model. This may involve facilitating loans to digital infrastructure providers to enable investment in the region.

Typically, such loans are made at commercial rates and targeted at both infrastructure deployment and innovation. An example is the Cardiff Capital Region City Deal which has an innovation, infrastructure and challenge fund. This approach also satisfies state aid.

<https://www.cardiffcapitalregion.wales/wp-content/uploads/2019/06/ccr-investment-framework.pdf>

Broadway Partners have used such facilities in Monmouthshire where a loan was granted for the provision of broadband radio access services and fibre backhaul in

the hardest to reach parts of the County not reached by the Welsh Government national programmes.

Points to note are that:

- Typically, financial support is offered as debt not equity funding. Hence there are no SPVs to be established and managed
- Deals of this nature typically stimulate emerging innovative players to invest in rural areas and hence competition is stimulated
- In the event that the investment venture fails, SBCD would have step in rights and would take ownership of any assets deployed

4 Financial Case

4.1 Introduction

This section presents the financial case for the Digital Infrastructure programme. Key assumptions in this case are;

- All capital-intensive procurements take place in the financial year 2021/22
- All capital programmes are spent over a four-year period between 2021/22 and 2025/26
- A Digital Infrastructure programme team is recruited and commences work from Q4 2020
- All demand stimulation and supplier engagement activities commence in Q4 2020 and continue throughout a 5-year period

For the sake of consistency costs are presented for each of the rural, connected Places and Next Generation Wireless themes.

In addition the following points should be noted:

- **Income Streams:** An income stream is not envisaged under this programme. Expenditure is incurred for the purposes of procuring infrastructure for the public sector own use or GAP funding telecommunications infrastructure investment into areas that are not commercially viable. It should be noted that some authorities in the UK have sought to generate income through the commercial use of public sector assets (notably ducts). However, this is not envisaged in the SBCD region at present

4.2 Funding Sources - Capital Expenditure

This section presents the capital expenditure profile for each of the themes. The following points should be noted;

- In each table the anticipated contribution from SBCD, commercial sector and central government has been estimated
- In a number of cases it is anticipated that the programme will encourage additional further on-going commercial investment. This has been estimated wherever possible
- No commercial or central funding sources are guaranteed at the time of writing and will be dependent on the outcome of procurements and the region successfully applying for central government grant funding.

4.2.1 Rural

Rural capital expenditure will rest on the conduct of:

- SBCD led in-fill procurement
- Any SBCD funding to community schemes

- Central government investment in rural connectivity in the region through national schemes such as the DCMS Rural Gigabit Connectivity. Such funds will be for capital only. The Govt has stated that £200m of grants annually will be provided and distributed across the UK. SBCD will need to apply for such grant funding. We have used a conservative baseline assumption that the region captures 1% of national funds per year but this will dependent on the rules for fund allocation and the strength and merits of the region compared with other competitive bids.

In addition, the USO fund is also anticipated to provide extensive capital investment in rural infrastructure in the region but the scale and timing is unknown at the time of writing.

It should be noted that there is limited pro-active commercial appetite for investment in outlying rural areas for the provision of digital services. Such activity has to be initially largely stimulated by public sector intervention. However, in the event that such an intervention occurs, the private sector may subsequently invest. For example, in a rural settlement the initial delivery of fibre into the settlement is likely to be public sector funded and targeted at a community hub such as a school or health centre. However, once this footprint has been established the commercial sector may connect contiguous residential or business premises as the marginal cost of such a connection will have been reduced.

Project Capital Expenditure						
(£m)	Year 1 (20/21)	Year 2 (21/22)	Year 3 (22/23)	Year 4 (23/24)	Year 5 (24/25)	Total
SBCD	-	3.0	2.0	1.0	-	6.0
Central Government Grants	2.0	2.0	2.0	2.0	2.0	10.0
Private Sector		1.0	1.0	1.0	1.0	4.0
Total	2.0	6.0	5.0	4.0	3.0	20.0

Table 38 - Estimated Rural Capital Expenditure Profile and Funding Sources

4.2.2 Connected Places/ Economic Development Areas

The chosen options include a requirement for new duct and fibre infrastructure to be built in the key cities and development zone of the region. A detailed bottom-up cost modelling exercise was undertaken and the projected capital costs of the build programme was £19.5m. This assumes:

- Infrastructure is built in each of the priority areas identified in the economic case, notably Swansea, Neath, Port Talbot, Llanelli, Carmarthen, Pembroke Dock, Haverfordwest, Crosshands and Milford Haven.
- There is a build of new duct infrastructure across the region to facilitate this fibre deployment. It is possible that costs might be lowered through wholesale access

to commercial owned ducting (notably from BT). However, this will not be known until the procurement process is completed. Some telecommunications providers do not use third party ducting as they prefer to own their own infrastructure for reasons of financial, operational and management control. In addition, there may be a desire on behalf of the public sector to build and own its own ducting over some routes.

There is a greater commercial appetite for investment in key urban economic development areas and significant commercial investment has been leveraged elsewhere in the country. This is typically in two stages; an initial contribution to the building of a network to public sector sites followed by further waves of investment as the commercial sector connects residential and business premises.

Once again, such activity has to be initially stimulated by public sector intervention through the state aid compliant approach of connecting public sector premises. A number of other Cities have adopted this approach and these are attracting inward investment from industry. For example, Vodafone has announced a plan to build FTTP connectivity to 5m homes by 2025. So far, the cities that have been chosen are those where it has access to a dark fibre network infrastructure of the type envisaged in this programme. They include Peterborough, Milton Keynes, Aberdeen, Stirling, Coventry, Edinburgh and Huddersfield. In all of the above cases the Councils have driven inward investment through the use of public sector purchasing power to anchor investment.

Table 33 below presents the estimated capital expenditure profile for this programme of work. It assumes that;

- A procurement is conducted throughout 2021 with contract award by end of the year
- A three-year build programme commencing in 2021/22
- Capital costs are paid upon delivery of key build milestones (e.g. routes completed, or sites connected)
- The commercial sector contributes 40% of initial build costs for connectivity to public sector sites as it will subsequently be in a position to commercialise this infrastructure.

Project Capital Expenditure						
(£m)	Year 1 (20/21)	Year 2 (21/22)	Year 3 (22/23)	Year 4 (23/24)	Year 5 (24/25)	Total
SBCD	-	4.0	5.0	3.0	-	12.0
Central Government Grants	-	-	-	-	-	0.0
Private Sector	-	2.5	2.5	2.5	-	7.5
Total	0.0	6.5	8.0	5.0	0.0	19.5

Table 39 - Estimated Connected Places Capital Expenditure Profile and Funding Source

4.2.3 Next Generation Wireless

Table 34 presents the capital expenditure profile for the Next Generation Wireless theme. This is driven by the accelerated deployment by CSPs and potentially neutral host providers of 5G and IoT services over 5 years. This investment will be primarily commercially led under an intervention model supported by SBCD.

The tables show a front ended expenditure, this is considered reasonable and indeed necessary as all of the digital infrastructure will enable later benefits. The sooner the infrastructure is in place the sooner benefits can be realised. It is also stand-alone in that much of the expenditure is time limited only by the availability of resources within the digital infrastructure team.

Project Capital Expenditure						
(£m)	Year1 (20/21)	Year 2 (21/22)	Year 3 (22/23)	Year 4 (23/24)	Year 5 (24/25)	Total
SBCD	-	1.5	0.5	0.5	-	2.5
Central Government Grants	-	-	-	-	-	0.0
Private Sector	-	3.0	1.0	1.0	-	5.0
Total	0.0	4.5	1.5	1.5	0.0	7.5

Table 40 - Estimated Capital Expenditure Profile and Funding Sources

4.3 Funding Sources - Revenue Expenditure

4.3.1 Rural

Revenue costs will be incurred under the rural programme for:

- Supply side engagement
- Demand stimulation.

In addition, costs are incurred during any procurement undertaken. These will be both in-house staff resources and external consultancy and legal support (procurement and state aid). It is assumed an in-fill procurement is undertaken in 2021/22

Estimated costs by activity are presented below.

Estimated Revenue Costs						
(£m)	Year1 (20/21)	Year 2 (21/22)	Year 3 (22/23)	Year 4 (23/24)	Year 5 (24/25)	Total
Supply side engagement	0.15	0.15	0.15	0.15	0.15	0.75
Demand stimulation	0.8	1.0	1.0	1.0	1.0	5.0
Procurement support:						
internal	-	0.1	-	-	-	0.25
external		0.15				
Total	1.15	1.4	1.15	1.15	1.15	5.8

Table 41 - Estimated Rural Programme Revenue Costs

4.3.2 Connected Places

It is assumed that any duct/fibre infrastructure built as part of this programme will be maintained and commercialised by a commercial partner. As a result, revenue costs are relatively light and limited to;

- On-going supplier engagement and demand stimulation. However, it has been assumed that the resources recruited and tasked with this activity for the rural programme will also address these activities in the urban areas. Hence an additional expenditure of £50k per annum has been included
- One-off procurement of duct and full fibre infrastructure assumed in 2021/22

Estimated Revenue Costs						
(£m)	Year1 (20/21)	Year 2 (21/22)	Year 3 (22/23)	Year 4 (23/24)	Year 5 (24/25)	Total
Supply side engagement and demand stimulation	0.05	0.05	0.05	0.05	0.05	0.25
Procurement support:	-					
internal		0.1	-	-	-	0.25
external		0.15				
Total	0.05	0.3	0.05	0.05	0.05	0.5

Table 42 - Estimated Connected Places Programme Revenue Costs

4.3.3 Next Generation Wireless Corridor

Estimated Revenue Costs						
(£m)	Year1 (20/21)	Year 2 (21/22)	Year 3 (22/23)	Year 4 (23/24)	Year 5 (24/25)	Total
Next Generation Wireless	-	0.5	0.5	0.5	0.5	2.0
Total	-	0.5	0.5	0.5	0.5	2.0

Table 43 - Estimated Next Generation Wireless Programme Revenue Costs

4.3.4 Revenue Expenditure Summary

Estimated Revenue Costs						
(£m)	Year1 (20/21)	Year 2 (21/22)	Year 3 (22/23)	Year 4 (23/24)	Year 5 (24/25)	Total
Rural	1.0	1.5	1.0	1.0	1.0	5.5
Connected Places	0.05	0.3	0.05	0.05	0.05	0.5
Next Generation Wireless	-	0.5	0.5	0.5	0.5	2.0

Total	1.05	2.3	1.55	1.55	1.55	8.0
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Table 44 - Estimated Digital Programme Revenue Costs

4.4 Funding Summary

The table below summarises the budget spend and investment sources along with associated benefits. Assumptions are presented in enclosed Annex.

Stream	Total Budget Spend (Revenue and Capital over 5 years)	Direct SBCD Capital Contribution	Direct SBCD Revenue Contribution	Other Public Sector Contribution	Direct Commercial Contribution	Additional Commercial Sector Pull through Investment	GVA Uplift over 15 years from Budget Investment]
Rural							
Option 2; Supplier Engagement	0.5	-	0.5	-	-	-	-
Option 3; Demand Stimulation	5.0	-	1.5	3.5	-	28.9	17.5
Option 4; In-fill Procurement	20.0	6.0	-	10.0	4.0	20.0	70.0
Connected Places							
Options 3/4 Duct Investment/Procurement	20.0	12.0	0.5	-	7.5	70.0	220.0
Next Generation Wireless							
Option 3; Infrastructure Review	2.0	-	2.0	-	-	-	-
Option 5; Support for Specific Projects	7.5	2.5	-	-	5.0	3.0	11.3
Total	55.0	20.5	4.5	13.5	16.5	121.9	318.8

Table 45 - Funding Summary

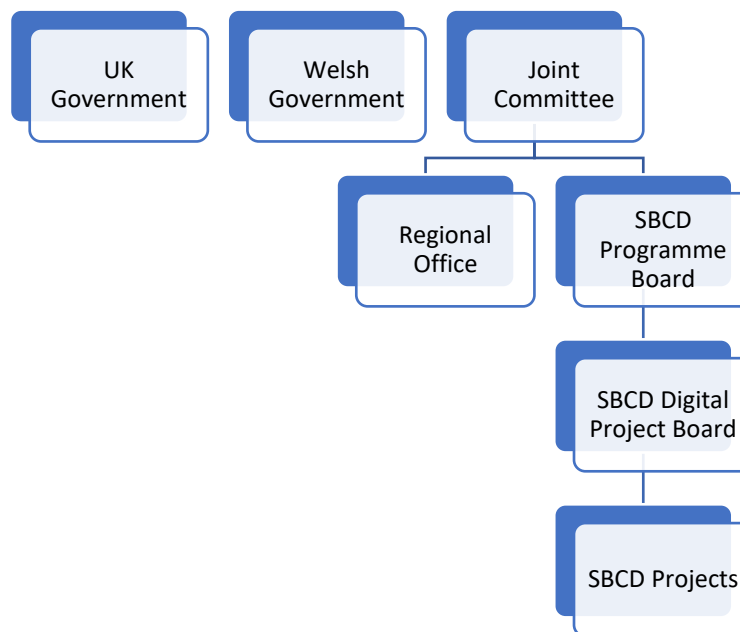
5 Management Case

5.1 Programme Management

The following structure will be established to deliver the SBCD Digital Infrastructure project.

5.1.1 Roles and Responsibilities

Figure 13 - SBCD Overarching Governance Structure



The Digital Infrastructure project is one of the nine Swansea Bay City Deal projects and, as such, is bound by the overarching governance operating model of the Swansea Bay City Region in the above figure, as defined in the Heads of Terms agreed by both the UK and Welsh Governments and the four Local Authorities. The Project will conduct its business in accordance with the City Deal regional strategy and parameters set out by the SBCR Joint Committee, Economic Strategy Board and Programme Board. Further detail on programme governance can be found in the Heads of Terms and the SBCD Implementation Plan.

- The **Joint Committee** has overall responsibility and accountability for the management and delivery of the Swansea Bay City Deal. The Joint Committee consists of membership from the four local authorities of Carmarthenshire, Neath Port Talbot, Pembrokeshire and Swansea as well as the University of Wales Trinity Saint David; Swansea University, Hywel Dda Health Board and Abertawe Bro Morgannwg Health Board as co-opted members. The Joint Committee is responsible and accountable for all decisions pertaining to the delivery of the City Deal. This includes; the identification, approval and implementation of governance

structures, management of financial and legal matters, performance management and monitoring as well as the progression of the regionalisation agenda.

- The **Economic Strategy Board** (ESB), which is representative of the private sector, provides strategic direction and advice to the Joint Committee on matters relating to the City Deal particularly in relation to investment proposals and in monitoring progress of the Deal. Its role also involves ensuring that the wider business community is fully engaged with the City Deal delivery in order to secure the programme's long-term legacy. The ESB will identify activity required to support the growth of the City Deal sectors with particular reference to the wider supply chain and make recommendations on this and other opportunities to maximise the impact of the City Deal across the region to the Joint Committee.
- The **Programme Board** consists of the 4 local authorities and wider membership from primary Stakeholder Partners: University of Wales Trinity St David; Swansea University and Abertawe Bro Morgannwg and Hywel Dda University Health Boards. In maintaining the role of an 'overseer', the Programme Board is responsible for ensuring the practical delivery of the Deal in its entirety with a particular role in supporting and monitoring project development; overseeing financial implications and managing risks, identifying benefits and constraints and ensuring that synergies between projects are maximised and activities are in strategic and economic concurrence with the 15 year City Deal plan.
- The **Accountable Body** is the legal entity which acts on behalf of the City Deal Joint Committee in discharging all statutory requirements in respect of the City Deal. The Accountable Body is responsible for ensuring that correct and robust financial, legal and governance arrangements and frameworks are in place for managing the City Deal. It also has a compliance and assurance role in ensuring that all decisions made by the Joint Committee are handled within financial and legal frameworks and are therefore lawful, appropriate and within budget. The Accountable Body provides technical expertise and support to the Joint Committee, Programme Board, Regional Office and other City Deal functions as appropriate in discharging its responsibilities
- The **Regional Office** is the central support and coordinating function to facilitate the delivery of all projects within the City Deal portfolio. This will involve consultative support on governance, project monitoring and evaluation, communication/engagement and liaison with Welsh and UK Governments. Operating within a well-defined regional framework delivers overall governance and ensures that the interrelationship between the projects can be utilised to deliver optimal outcomes and benefit maximisation across the City Region.

Digital Project Board –

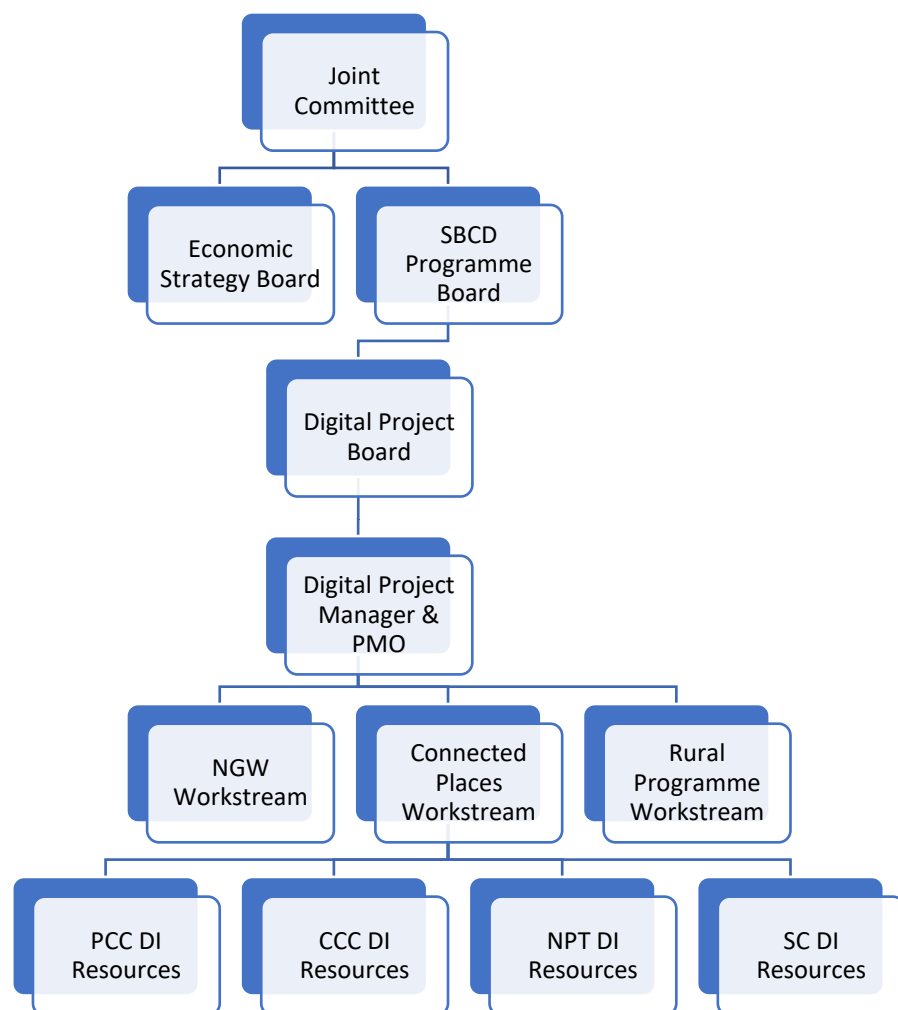
The Digital Project Board will head the governance structure for the project and through the Digital PM will ensure the project is managed effectively, to approved timescales and in line with the governance structure of partner organisations. The Digital Project Board has overall responsibility for decisions pertaining to the strategic direction and, where appropriate, the operational delivery of the Digital Infrastructure scheme.

These responsibilities include but are not exclusive to:

- Approval of all major plans
- Approval of all deviations from agreed tolerances
- Arbitration on any conflicts that cannot be resolved at Project level
- Taking ownership of major risks and issues
- Approval and sign off of key project documentation
- Approving and funding key changes

SBCD will identify a Digital Project Board Chair and Senior Responsible Owner. The regional Digital Project Board will consist of senior lead officers from all regional Local Authorities, Universities and Health Boards and identified lead officers for Procurement, Legal, Communications and Finance. The Board will invite representation from Welsh and UK Governments. This regional Digital Project Board is responsible for guaranteeing equity and catering for the diverse needs of all partners and stakeholders. The Board will be accountable to the Swansea Bay City Deal Programme Board, as defined in its formal terms of reference.

Figure 14 - Organisational Structure



Digital Infrastructure Project Team –

A central Digital Infrastructure Project Manager (PM) and Project Management Office (PMO) team will be established to oversee and steer digital strategy and policy for the region in liaison with UKG, WG and the private sector. The Project Manager is charged with meeting project aims and objectives as set out in the project business case, overseeing risk and governance, maintaining communication and engagement across all sectors, and achieving project outcomes, including community benefits.

The PMO will be hosted by Carmarthenshire who are the named lead authority for the Digital Project within the City Deal and will be accountable to the Digital Project Board, Programme Board and Joint Committee as required. The central PMO team will comprise of:

- Digital Project Manager – SBCD
- Digital Infrastructure Officer x 3

In order to deliver the business plan the Project team will be responsible for the;

- Development of overall digital strategy
- Maximising and coordinating funding opportunities for the Region
- Interaction with Welsh and UK Govts on digital programmes
- Co-ordination and management of regional Digital procurement activities
- Supply side engagement with industry
- Development of regional procurement frameworks and procurement templates
- State aid guidance
- Development of regional guidelines and approach to demand stimulation
- Market analysis and monitoring of infrastructure deployed.

Where required the project team will utilise internal Local Authority services for procurement and other technical support. Also, where required the project team will utilise external legal (for state aid and procurement) and technical support.

Work streams –

Each work stream comprises of appropriate multidisciplinary membership to progress the key themes of the SBCD Digital Infrastructure Project

Local Authorities –

- Each authority continues to buy its own managed services from PSBA
- Each authority undertakes demand stimulation activities in its own area – possibly using a regionally agreed approach and collateral.
- Each authority owns and controls its own assets within its area
- Authorities provide dedicated support to procurement teams as required to support procurement activity and are responsible for definition of local requirements and installation planning

The Digital Infrastructure team will comprise of the following roles;

Resource	Number of FTE	Role	Locations
Project Manager – SBCD Digital Programme	1	Strategy, Fundraising, Stakeholder co-ordination, Interaction with Welsh and UK Govts	Swansea Bay City Deal (Hosted by Carmarthenshire)
Digital Project Officer	3	Support above activities	Swansea Bay City Deal (Hosted by Carmarthenshire)
Local authority, Health Board and University procurement support as required	0.25	Procurement	Each authority as required
Commercial /State aid legal advisor	0.25	Procurement	External
Local Authority, Health Board and University ICT Lead	0.25 per authority	Procurement and Build	Each authority
Local Authority, Health Board and University Asset management	0.25 per authority	Procurement and Build	Each authority
Local Authority, Health Board and University Network Analyst	0.25 per authority	Procurement and Build	Each authority
Local Authority, Health Board and University Marketing Officers	1per authority	Co-Ordination Marketing Demand stimulation	Each authority

Table 46 – Resources

5.1.2 Procurement resources and responsibilities

Two major procurements are envisaged under the Digital Infrastructure business case;

- Rural; Community hubs and in-fill of business and residential premises
- Connected Places; Full fibre/Duct Infrastructure

The above structure will require that these activities are completed as follows;

Rural

For procurement under the Rural element of the project, SBCD will be undertaking one or both of the following activities depending on identified need;

- Prioritising public sector sites to be used as hubs under the Regional Gigabit Connectivity Fund
- Procuring in-fill solutions to un-served residential and business premises through a national Dynamic Purchasing System/Framework

For both activities it is recommended that:

- Regional requirements be quantified and identified by the central Digital project team with the support of Digital leads from each authority and other key stakeholders who can prioritise target areas and service requirements in their local authority / service area
- The Central Digital project team will manage call off contracts from national programmes with Local Authority Digital Leads to co-ordinate local implementation and associated activities such as planning, street works and community engagement.

Connected Places

For procurement under the Connected Places element of the Digital project a SBCD regional framework will be established from which local authorities are able to call off procurements.

- The framework will be developed and procured by the central Digital projects Team with the call off contract scope defined by Local Authority leads. The scope will include sites, service requirements, operations, service and support and budgets. Where the footprint of the network procurement is likely to cross authority boundaries one local authority may take a co-ordination lead of behalf of some or all authorities if agreed.
- Local Authority Leads to manage and co-ordinate local implementation as with the Rural programme.

Supply Side Engagement and Next Generation Wireless

The central Digital Project team will be responsible for regional co-ordination of supply side engagement with industry. This will include:

- Briefing industry on regional plans and requirements
- Lobby for inward investment
- Promotion of regional opportunities for deployment of new technologies and services

- Arranging site visits, events etc
- Providing single interface between industry and the regional public sector bodies and a point of contact for issues such as planning, way leaves etc
- Co-ordination of programmes with UK Govt and Welsh Government

In addition, the team will be responsible for liaising with mobile operators and wireless service providers to manage all aspects of the Next Generation Wireless stream.

5.1.3 Demand Stimulation

The central Digital Project team will undertake a co-ordinating role and prepare regional collateral. Roles will include;

- PR and promotion
- Establishment of case studies of benefits and usage
- Events
- Promotion of connection voucher schemes of UK and regional Govt
- Provision of technical, commercial and legal support to community groups

The team will therefore be a resource to support each local authorities' own staff who are dedicated to local demand stimulation activities including;

- Engagement with local stakeholders such as business groups, community organisations etc
- Support and training programmes
- Use of social media
- Web based support

5.1.4 Programme Plan

Digital Infrastructure Programme Outline

17/08/2020

Cube

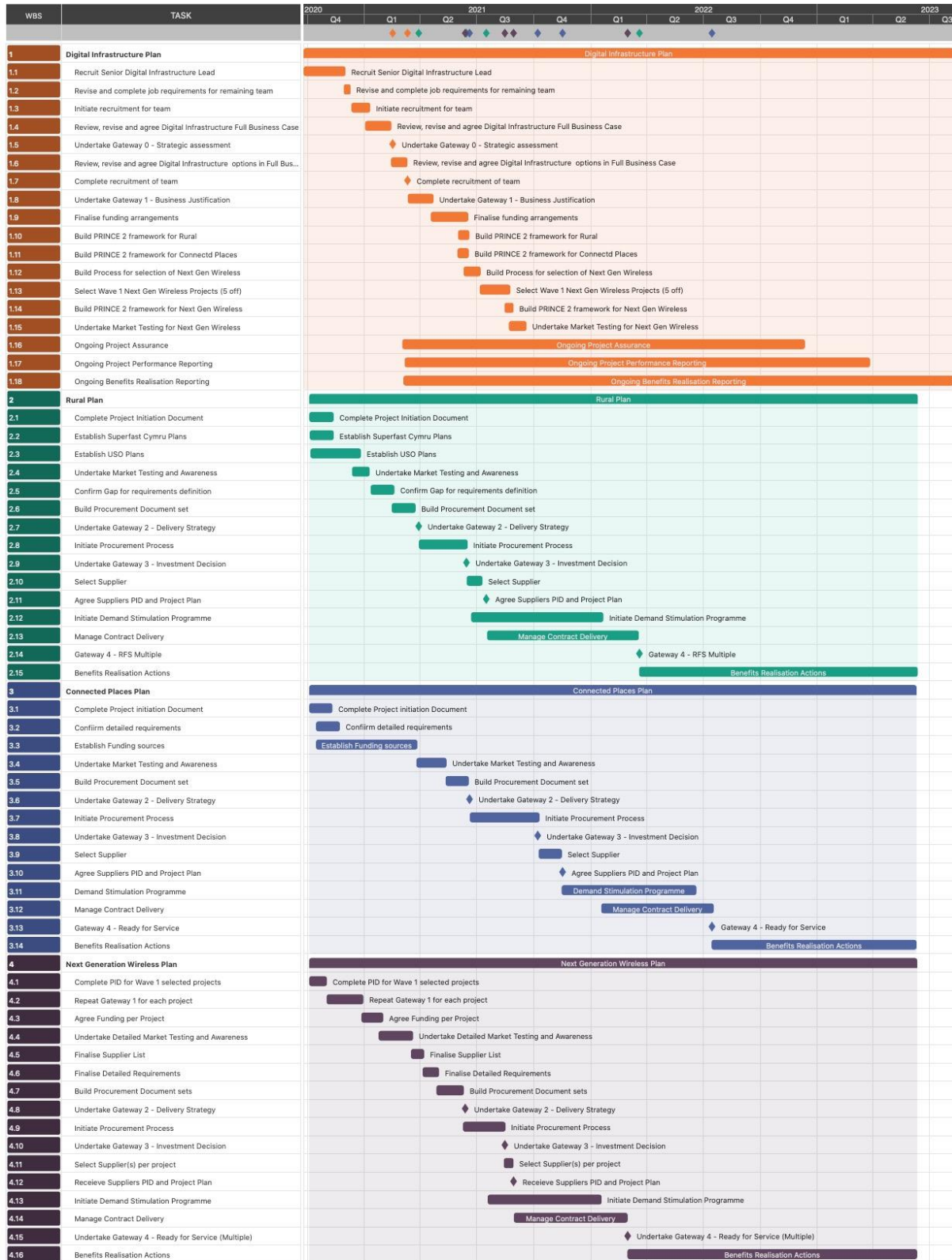


Figure 15 - Gantt Chart

5.1.5 The Work Breakdown Structure

WBS	TASK NAME	TASK KIND	START	FINISH
1	Digital Infrastructure Plan	Task group	25-Sep-20	09-Aug-23
1.1	Recruit Senior Digital Infrastructure Lead	Task	25-Sep-20	01-Dec-20
1.2	Revise and complete job requirements for remaining team	Task	29-Nov-20	09-Dec-20
1.3	Initiate recruitment for team	Task	11-Dec-20	10-Jan-21
1.4	Review, revise and agree Digital Infrastructure Full Business Case	Task	02-Jan-21	13-Feb-21
1.5	Undertake Gateway 0 - Strategic assessment	Milestone	14-Feb-21	14-Feb-21
1.6	Review, revise and agree Digital Infrastructure options in Full Business Case	Task	13-Feb-21	11-Mar-21
1.7	Complete recruitment of team	Milestone	10-Mar-21	10-Mar-21
1.8	Undertake Gateway 1 - Business Justification	Task	12-Mar-21	22-Apr-21
1.9	Finalise funding arrangements	Task	18-Apr-21	17-Jun-21
1.10	Build PRINCE 2 framework for Rural	Task	01-Jun-21	19-Jun-21
1.11	Build PRINCE 2 framework for Connected Places	Task	31-May-21	18-Jun-21
1.12	Build Process for selection of Next Gen Wireless	Task	10-Jun-21	07-Jul-21
1.13	Select Wave 1 Next Gen Wireless Projects (5 off)	Task	06-Jul-21	24-Aug-21
1.14	Build PRINCE 2 framework for Next Gen Wireless	Task	15-Aug-21	29-Aug-21
1.15	Undertake Market Testing for Next Gen Wireless	Task	22-Aug-21	19-Sep-21
1.16	Ongoing Project Assurance	Task	03-Mar-21	12-Dec-22
1.17	Ongoing Project Performance Reporting	Task	07-Mar-21	27-Mar-23
1.18	Ongoing Benefits Realisation Reporting	Task	05-Mar-21	09-Aug-23
2	Rural Plan	Task group	04-Oct-20	12-Jun-23
2.1	Complete Project Initiation Document	Task	04-Oct-20	12-Nov-20
2.2	Establish Superfast Cymru Plans	Task	05-Oct-20	12-Nov-20
2.3	Establish USO Plans	Task	06-Oct-20	26-Dec-20
2.4	Undertake Market Testing and Awareness	Task	12-Dec-20	09-Jan-21
2.5	Confirm Gap for requirements definition	Task	11-Jan-21	18-Feb-21
2.6	Build Procurement Document set	Task	14-Feb-21	24-Mar-21
2.7	Undertake Gateway 2 - Delivery Strategy	Milestone	28-Mar-21	28-Mar-21
2.8	Initiate Procurement Process	Task	30-Mar-21	16-Jun-21
2.9	Undertake Gateway 3 - Investment Decision	Milestone	13-Jun-21	13-Jun-21
2.10	Select Supplier	Task	15-Jun-21	10-Jul-21
2.11	Agree Suppliers PID and Project Plan	Milestone	15-Jul-21	15-Jul-21
2.12	Initiate Demand Stimulation Programme	Task	22-Jun-21	21-Jan-22
2.13	Manage Contract Delivery	Task	18-Jul-21	19-Mar-22
2.14	Gateway 4 - RFS Multiple	Milestone	19-Mar-22	19-Mar-22
2.15	Benefits Realisation Actions	Task	20-Mar-22	12-Jun-23
3	Connected Places Plan	Task group	04-Oct-20	10-Jun-23
3.1	Complete Project initiation Document	Task	04-Oct-20	10-Nov-20
3.2	Confirm detailed requirements	Task	15-Oct-20	22-Nov-20
3.3	Establish Funding sources	Task	15-Oct-20	27-Mar-21
3.4	Undertake Market Testing and Awareness	Task	26-Mar-21	13-May-21
3.5	Build Procurement Document set	Task	12-May-21	18-Jun-21
3.6	Undertake Gateway 2 - Delivery Strategy	Milestone	18-Jun-21	18-Jun-21
3.7	Initiate Procurement Process	Task	20-Jun-21	10-Oct-21
3.8	Undertake Gateway 3 - Investment Decision	Milestone	06-Oct-21	06-Oct-21
3.9	Select Supplier	Task	09-Oct-21	15-Nov-21
3.10	Agree Suppliers PID and Project Plan	Milestone	15-Nov-21	15-Nov-21
3.11	Demand Stimulation Programme	Task	15-Nov-21	20-Jun-22
3.12	Manage Contract Delivery	Task	18-Jan-22	18-Jul-22
3.13	Gateway 4 - Ready for Service	Milestone	14-Jul-22	14-Jul-22
3.14	Benefits Realisation Actions	Task	15-Jul-22	10-Jun-23
4	Next Generation Wireless Plan	Task group	04-Oct-20	11-Jun-23
4.1	Complete PID for Wave 1 selected projects	Task	04-Oct-20	01-Nov-20
4.2	Repeat Gateway 1 for each project	Task	01-Nov-20	30-Dec-20
4.3	Agree Funding per Project	Task	27-Dec-20	31-Jan-21
4.4	Undertake Detailed Market Testing and Awareness	Task	24-Jan-21	20-Mar-21
4.5	Finalise Supplier List	Task	17-Mar-21	07-Apr-21
4.6	Finalise Detailed Requirements	Task	05-Apr-21	01-May-21
4.7	Build Procurement Document sets	Task	27-Apr-21	10-Jun-21
4.8	Undertake Gateway 2 - Delivery Strategy	Milestone	11-Jun-21	11-Jun-21
4.9	Initiate Procurement Process	Task	09-Jun-21	16-Aug-21
4.10	Undertake Gateway 3 - Investment Decision	Milestone	14-Aug-21	14-Aug-21
4.11	Select Supplier(s) per project	Task	14-Aug-21	29-Aug-21
4.12	Receive Suppliers PID and Project Plan	Milestone	28-Aug-21	28-Aug-21
4.13	Initiate Demand Stimulation Programme	Task	19-Jul-21	18-Jan-22
4.14	Manage Contract Delivery	Task	30-Aug-21	01-Mar-22
4.15	Undertake Gateway 4 - Ready for Service (Multiple)	Milestone	28-Feb-22	28-Feb-22
4.16	Benefits Realisation Actions	Task	01-Mar-22	11-Jun-23

5.1.6 Use of special advisors

Specialist advisors may be necessary in the following areas:

- Technical
 - Capture of requirements
 - Production of service definitions
 - Production of procurement documentation
 - Interaction with stakeholders and national and regional governments
 - Supplier dialogue
- Legal
 - Draft contracts
 - State aid guidance and judgements
 - Procurement support in dialogue and contract finalisation

Such advisors are readily available from most large consultancy firms, but also from smaller bespoke consultancies.

There are a small number of legal companies with a track record in digital infrastructure procurements and specialist state aid units.

5.2 Arrangements for Contract and Change Management

The programme and project management approach will vary between each of the three Digital Infrastructure strands. However, in general terms, the approach will fall into one of two;

- For options that do not involve a procurement, there will be an objective setting phase and a project plan of actions, many of which will be ongoing rather than a specific fixed outcome, as an example Demand Stimulation activities
- For procurements, the SBCD programme and project management functions will be the responsibility of the supplier, SBCD will monitor, manage and provide assurance against the contracted requirements

In all cases PRINCE 2 will be adopted as the project management tool set. Where external suppliers are responsible for the programme and project management, they will be required in contract to adopt PRINCE 2, or they shall certify their practices meet or exceed the standards within PRINCE 2. Any and all project plans must be fully integrated across the relevant workstreams.

All projects will be required to construct a fully resourced project plan using Microsoft Planner or an equivalent professional level planning tool. Progress updates will be provided to the SBCD management team on a monthly basis. All plans will be baselined

and agreed with the SRO prior to project initiation. Revised plans can be proposed quarterly and adopted by the SRO programme team at their discretion.

5.3 Benefits Realisation

The measurement of benefits within the supply of an enabling digital infrastructure is problematic as there are so many moving parts that change and benefits could be assigned to. The key SMART objectives will be fully laid out under the Prince 2 methodology so that the delivery can be clearly identified in terms of physical assets and digital service coverage delivered.

An overarching benefits measure should be the percentage of households or SMEs in a given area taking up the digital services available. Some reports have indicated that an 80% take up could be expected for services of 30Mbps and more. Currently the regional take up is nearer 40%. Movement from the current level upwards once the Digital Infrastructure project is launched should be monitored quarterly as a key benefits realisation metric.

The use of the assets and service coverage once deployed are unrestricted, and benefits can flow from a wide range identified within the strategic case and also other as yet unspecified Use Cases that may emerge.

In order to measure a benefit against this list, ideally a base-line position would need to be identified, so that improvement or degradation can be seen. Unfortunately, the setting of a base-line would be open to interpretation and take a considerable amount of time and effort. It is therefore proposed that use is made of a sampling based primary research is used to identify improvements and hence benefits.

A Benefits Register template is given in Annex 3.

The measurement is not meant to be comprehensive, but focus instead on the most likely indicators that would give a positive measure of the introduction and use of digital infrastructure. The measurement itself will need to be carried out through sample based primary research programme, which will allow additional benefits to surface.

If possible, the benefit register should be utilised as part of any voucher scheme or connectivity engagement and support given to households or SMEs. By getting the actual users of the digital infrastructure to provide a before and after view in relation to the introduction or increased use of digital services would act as a very strong evidence base.

5.4 Arrangements for Risk Management

5.4.1 Risk Management Strategy

Within Prince 2, risk management, is fundamental to the process

5.4.2 Risk Register

The risk register should be a live document that is updated and referred to across the project delivery timescales and only retired once projects have been completed. The document is a fundamental input to the assurance and monitoring activities and to the final project impact assessment and evaluation.

A proposed layout for the anticipated projects is given in Annex 2.

5.5 Monitoring and Assurance

5.5.1 Assurance Framework

An assurance framework is included within the Prince 2 methodology and it is recommended this is adopted.

5.5.2 Post Project Evaluation

It is recommended that an independent body is tasked with post project evaluation, measured against the objectives and risk management within the business case. It is likely that further cross-cutting analysis would be beneficial, particularly in the role digital infrastructure has played within the areas of social cohesion and sustainability of communities.

It is also recommended that an independent project review is undertaken after 3 years of the digital infrastructure is approved. This will be initial findings and help bed down the assessment criteria and allow any adjustments in the information being collected by the interventions themselves to help clarify the inputs to the post project work.

Glossary

Ref	Expansion
SBCD	Swansea Bay City Region Deal
GVA	Gross Value Added
3G	Third Generation Mobile Services
4G	Fourth Generation Mobile Services
4G-Adv	4G using spectrum aggregation for higher speeds
5G	Fifth Generation Mobile Services
FttP	Fibre to the Premises
FttC	Fibre to the Cabinet
Industry 4.0	4th generation industrial - digital control
IoT	Internet of Things, Machine to Machine
WiFi	Wireless Local Area Network connectivity
Full Fibre	Gigabit/Sec connectivity
USO	Universal Service Obligation - Broadband
CSP	Communication Service Provider
DCMS	Department of Digital, Culture, Media & Sport
FTIR	DCMS, Future of Telecoms Infrastructure Review
LFFN	Local Full Fibre Networks
BT	British Telecoms
PSBA	Wales - Public Sector Broadband Aggregation
Prince 2	Project Management Process
NEC	New Engineering Contract Model
GPT	General Purpose Technology
EE	Everything Everywhere Mobile Operator
MNO	Mobile Network Operator
Mbs	Megebits of data per second
Gbs	Gigabits of data per second
Ultrafast	>100Mbs < 300Mbs
Superfast	>30Mbs < 100Mbs
SME	Small to Medium size Enterprise

Annex 1

Key Reference Sources

Ref	Document	Doc Page	Ref Page
	UK & Welsh Govt Swansea Bay City Deal MoU		
Sec 1	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/611685/Swansea_City_Deal_-_English.pdf	5	1
	Department for Business, Energy & Industrial Strategy The Grand Challenges		
Sec 1	https://www.gov.uk/government/publications/industrial-strategy-the-grand-challenges/industrial-strategy-the-grand-challenges	5	1
	DCMS Policy paper Connectivity - building world-class digital infrastructure for the UK		
Sec 1	https://www.gov.uk/government/publications/uk-digital-strategy/1-connectivity-building-world-class-digital-infrastructure-for-the-uk	5	1
	UK & Welsh Govt Swansea Bay City Deal MoU		
Sec 1.2	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/611685/Swansea_City_Deal_-_English.pdf	8	5
	The Internet Coast, SBCRD 2016-2035		
Sec 1.2	https://democracy.npt.gov.uk/documents/s20423/City	8	6
	Ofcom - Achieving decent broadband connectivity for everyone		
Sec 1.2	https://www.ofcom.org.uk/__data/assets/pdf_file/0028/95581/final-report.pdf	11	1
	Connected Cities Multiplier - Regeneris Report		
Sec 1.3 Fig 2	Rural Multiplier - Ofcom USO (see above)	12	
	Transport Corridor - The Benefits of 4G, Stockholm School of Economics http://www.biceps.org/assets/docs/petijumu-serija/TSIDP16		25
	Regeneris report: The Economic Impact of Full Fibre Infrastructure (Data Filtered for Swansea Only)		
1.4	https://www.cityfibre.com/wp-content/uploads/2018/03/The-Economic-Impact-of-Full-Fibre-Infrastructure-in-100-UK-Towns-and-Cities-12.03.18.pdf	13	1
	Deployment of FTTP in rural Northern Ireland A DotEcon report for NI Networks, part of BT		
1.4	https://www.dotecon.com/assets/images/Deployment-of-FTTP-in-rural-Northern-Ireland.pdf	14	4
	Ofcom Data Sources		
2.1	https://app.powerbi.com/view?r=eyJrjoiZTg4NDMyZjctNWJhZS00MjNjLWlxYzMtZjkwYzljNDk2NzdmliwidCI6IjBhZjY0OGRILTMxMGMtNDNA2OC04YWU0LWY5ND E4YmFIMjRjYyIsImMiOj9	22	Data
	DCMS Future Telecoms Infrastructure Review		
2.1.1	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732496/Future_Telecoms_Infrastructure_Review.pdf	25	Report
2.1.5	WIK Report to Ofcom - The Benefits of Ultrafast Broadband Deployment	26	Report
2.3	Ofcom data sources as in section 2.1	39	Data
2.3.1	SQW Impact Assessment report on Next Gen Broadband Wales	40	60
2.3.1	Ofcom data sources as in section 2.1	40	Data

Annex 2 Risk Register. Showing early major risks. – Update to headings and review

Risk ID	Raised By	Date Raised	Risk Category	Description	Impact	Impact	Probability	Mitigation	Responsible Owner	Action Owner
No.	Name	Date	Source	Narrative	Time	Cost	Percent	Narrative	Name	
1			Business Case	There is currently a lack of resources engaged to deal with the Digital Infrastructure project. Urget recruitment is necessary	Red	Yellow	100%	1. Appoint recruitment agency 2. Second authority staff 3. Utilise external consultants to cover short term		
2			Business Case	Stakeholder coordination within the City Deal delays kick off	Red	Green	50%	Appoint digital lead as soon as possible		
3			Business Case	State Aid issues	Yellow	Yellow	30%	Seek legal advice across all three digital infrastructure streams		
4			Business Case	Supplier appetite to engage	Red	Green	30%	Appoint digital lead as soon as possible Engage with telecoms companies as widely as possible during project start-up		
5			Business Case	Prioritisation of funding from within SBCD funding allocation is low	Green	Green	10%	Ensure SBCD is fully engaged with the Digital Infrastructure project and aware of the enabling and transformative aspects of its delivery		
6			Projects	Integration with other funding interventions is not achieved leading to a loss of investment from external public sector sources	Red	Red	30%	Ensure the digital lead has this as a primary KPI and that it is a reported item for all risk management activities		
7			Projects	Demand side stimulation is not coordinated with digital infrastructure delivery timescales	Yellow	Yellow	20%	Ensure actions around demand stimulation is coordinated with the requisite digital infrastructure becoming available or are least assured in delivery		
8			Projects	Digital infrastructure interventions happen in a peicemeal manner and the leverage achievable between them is lost	Yellow	Yellow	20%	The digital lead must coordinate all three streams to maximise the impact they can achieve. It is likely that the investment in one stream will enable or encourage investment in another. Identify KPIs to support the leveraged poutcomes		
9			Rural Project	The unserved premises are not identified accurately	Red	Red	25%	Both the USO and Superfast Cymru must identify the premises they cover, if they are unable to do this clearly then the project will need to develop localised resources to identify premises with no or poor services		

Risk ID	Raised By	Date Raised	Risk Category	Description	Impact	Impact	Probability	Mitigation	Responsible Owner	Action Owner
No.	Name	Date	Source	Narrative	Time	Cost	Percent	Narrative	Name	
10			Rural Project	The number of premises to be connected by SBCD is higher due to unforeseen limitations in other intervention fund			20%	Prioritisation may be necessary and would be done in consultation between the digital lead and each authority		
11			Connected Places	Private sector will not utilise public sector assets due to quality or commercial arrangements			20%	Project team to fully understand the motivations and concerns of private sector investors to establish levels of challenges		
12			Connected Places	PSBA integration is problematic or PSBA is unable to extend its reach to rural communities			10%	Digital lead must work closely with the PSBA to ensure support and integration with their programmes and actions		
13			Connected Places	Fragmentation across Authorities in priority to support digital infrastructure			20%	Digital lead and project team to have close relationship with authorities infrastructure and ICT teams on deployment options and actions		
14			Connected Places	Local business fail to take up services once provided			20%	Demand side stimulation must lead the provision of digital infrastructure		
15			Next Generation Wireless	Use Cases are weak in support of SBCD projects and other innovative projects			30%	The project team will help shape and technically outline projects to ensure they are attractive to 5G investments		
16			Next Generation Wireless	The MNOs are challenged with multiple opportunities across the UK and SBCD projects are not seen as a priority			20%	Digital lead must engage with operators to ensure they are fully aware of both the ambitions and objectives of the SBCD projects		
17			Next Generation Wireless	Other 5G intervention funds are not capataised upon			40%	The digital lead and project team must work with other interested parties to ensure high quality proposals are delivered for additional UK national funding opportunities		

Annex 3

Benefits Register

The benefits register has been developed under different stages of the projects and against both quantitative and qualitative assessments. The first table references the Implementation Stage, representing a number of areas that will stimulate inward investment by the public sector in constructing the digital infrastructure assets and can all be measured to reveal quantitative outcomes.

The next two tables represent the operational benefits to be accrued by the digital infrastructure deployed. Again, these are quantitative measures that will give direct benefits to both the citizens and business communities in the region. Digital Infrastructure is an enabling environment and as such the benefits are dependent on uptake and usage and as such benefits are built across several actions, not just the availability of the infrastructure.

The final table is representative of qualitative benefits. In many cases, digital infrastructure will stimulate usage across a broad range social and business areas that although not delivering clear and measurable outcomes, will nevertheless offer significant improvements in current ways of delivering services and information to both the public and private sector.

The benefits registers should become living documents through the life of the SBCD Digital Infrastructure project. The benefits registers represented here are a starting point.

BENEFITS REGISTER

Project Name: *Digital Infrastructure* **Date:** Aug-20
Responsible Officer/Register Owner: xxxxx

This Benefits Register will be reviewed regularly and will form part a standing Agenda on the Project Board.

Note: All the benefits in the Strategic Case and Economic Case must be accounted for within the Benefits Register - this includes the Economic Appraisal for the Preferred Option.

This Register should cover all benefits - Financial, Non-Financial and Qualitative identified during the Implementation and Operational Phases of the project.

Benefit No:	Benefit Description	Benefit Target	Targeted End Achievement Date	Year Time Value			Data Sources	Activities Required/Critical Dates	Responsible Officer/Who will deliver it	How will it be evidenced	Reporting
				5yrs	10 yrs	15yrs					
<i>(unique no. in this register)</i>	<i>(including enabling project or activity)</i>	<i>Measurable Target - Expected level of change</i>	<i>Specific date when will the benefit be realised</i>	<i>(what benefits will be delivered over the 5yr, 10yr, 15yr period)</i>			<i>(what aspect of the project will give rise to the benefit - to facilitate monitoring)</i>	<i>(to secure the benefit)</i>			
IMPLEMENTATION PHASE											

QUANTITATIVE INDICATORS

Page 252	IP 1	Connected Places: Increased commercial investment leveraged by SBCD project	£10m initial investment; £50m pull through investment	2021-2025	£30m	£30m	Reporting from telecommunications operators. Initial investment and build out reporting to form part of contractual obligations	Procurement and finalise contracts by 2020/21; Followed by initial 18month build programme	SBCD Project Manager, Digital Procurement Officer and Legal/State aid advisor	Tempates in contracts to provide evidence of km of duct and fibre built; Number of public sector sites served with gigabit connectivity monitored by IT departments and SBCD Project Team	Monthly reporting on steps to achieve benefits realisation to the Project Board. Quarterly reporting to the SBCD Regional Office by the Project Lead and the SBCD Project Local Authority Lead to inform on progress towards achievement of the benefit. Project Lead to report to SBCD Regional Office when benefit target achieved. Project Lead to quartetly reports to SBCD Regional Office to highlight all changes to benefits outputs and outcomes.
	IP2	Connected Places: Improved public sector assets and connectivity	Number of public sector sites with gigabit capable fibre (281 sites) plus building of duct infrastructure	2020-2023	£20m		Reporting from telecommunications operators. Initial investment reporting to form part of contractual obligations	Procurement and finalise contracts by 2020/21; Followed by initial 18month build programme	SBCD Project Manager, Digital procurement Officer and Legal/State aid advisor	Tempates in contracts to provide evidence of km of duct and fibre built; Number of public sector sites served with gigabit connectivity monitored by IT departments and SBCD Project Team	Quarterly Reports to Project Board as above
	IP3	Next Generation Wireless; Accelerated deployment of 5G and IoT	£9m of initial investment	2020-2025	£9m	£9m	Reporting from mobile operators and service providers	Establish funding inventions by 2021	SBCD Project Manager & Digital Procurement Officer	Joint working with mobile service providers to establish reporting of deployment and investment levels	Quarterly Reports to Project Board as above
	IP4	Rural: Demand stimulation programme to increase service take up	Number of business and residential premises with NGS services	2020-2025	£5m	£15m	Reporting from Ofcom and telecoms industry	Stilumation activities on-going from 2019-2025	Local authority Marketing officers and analysts	Reporting from trelcommunications companies and national and regional Govt monitoring	Quarterly Reports to Project Board as above
	IP5	Rural in-fill procurement	Number of premises passed and service adoption rates	2020-2025	£20m	£5m	Reporting from telecommunications operators. Initial investment reporting to form part of contractual obligations	Procurement and finalise contracts by 2021; Followed by initial 2 year build build programme	SBCD Project Manager, Digital procurement Officer and Legal/State aid advisor	Tempates in contracts to provide evidence of premises passed;	Quarterly Reports to Project Board as above

BENEFITS REGISTER

Project Name: **Digital Infrastructure** Date: Aug-20

Responsible Officer/Register Owner: xxxxx

This Benefits Register will be reviewed regularly and will form part a standing Agenda on the Project Board.

Note: All the benefits in the Strategic Case and Economic Case must be accounted for within the Benefits Register - this includes the Economic Appraisal for the Preferred Option.

This Register should cover all benefits - Financial, Non-Financial and Qualitative identified during the Implementation and Operational Phases of the project.

Benefit No:	Benefit Description	Benefit Target	Targeted End Achievement Date	Year Time Value			Data Sources	Activities Required/Critical Dates	Responsible Officer/Who will deliver it	How will it be evidenced	Reporting
				5yrs	10 yrs	15yrs					
<i>(unique no. in this register)</i>	<i>(including enabling project or activity)</i>	<i>Measurable Target - Expected level of change</i>	<i>Specific date when will the benefit be realised</i>	<i>(what benefits will be delivered over the 5yr, 10yr, 15yr period)</i>			<i>(what aspect of the project will give rise to the benefit - to facilitate monitoring)</i>	<i>(to secure the benefit)</i>			
OPERATIONAL PHASE											

QUANTITATIVE INDICATORS

OP1	Gross new jobs directly created by the SBCD project	Direct employment in digital infrastructure deployment; Track employment levels in regional digital intensive industries; Track overall regional employment	15 years				Project Manager Monitoring Reports. Internal Management Information Systems' reporting data & HR records.	Ongoing from 2020	Project Lead	Project Manager project monitoring records. Floor/unit/building plans to show no of jobs that can be accommodated. Names of the businesses occupying the units/building/premises. Occupancy levels of buildings/no of businesses /jobs created in each business/total building & length of tenancies. Any documents to show that the jobs have been created and how many. Any other documents showing that these directly relate to the project - business' staff structure chart etc	Quarterly Reports to Project Board as above
OP2	Gross Value Added (GVA)	Monitor investment levels in programme; Apply national benchmarks and multipliers to derive GVA	15 years			>£350m (£200m Connected Places, £150m rural)	Utilise national and regional digital impact surveys	Ongoing from 2020	Digital Project Office and Economic Development to Monitor		Quarterly Reports to Project Board as above
OP3	Improve the quality of public service delivery by ensuring all public buildings are digitally connected facilitating improved efficiency and public access to services	In-house operational records for service availability and cost of service delivery	15 years				Service delivery reporting	Ongoing from 2020	Heads of Service to monitor service deliver and operational costs		Quarterly Reports to Project Board as above
OP4	Cost savings to the public sector for digital connectivity	Telecommunications service providers and PSBA billing records	15 years				ICT infrastructure billing	Ongoing from 2020	ICT leads and network analysts	Monitor on-going ICT connectivity expenditure	Quarterly Reports to Project Board as above
OP5	Stimulation of competition in digital services	Track operator and service provider presence in region; Benchmark services and tariffs	15 years				Monitoring of services and costs - benchmarked against national and regional service offerings	Ongoing from 2020	Network analysts and marketing officers	Ofcom reports, analysts reports, Welsh Govt monitoring	Quarterly Reports to Project Board as above
OP6	Deliver economic benefits through the usage of digital infrastructure, notably increased efficiency and enhanced productivity.	Local authority and health boards operational reports	15 years				Industry surveys and case studies	Ongoing from 2020	ICT leads and Heads of service	Service delivery operational cost reporting	Quarterly Reports to Project Board as above
OP7	Improve the quality of public service delivery by ensuring communities in remote areas have access to services		15 years				Monitor service access and delivery and benchmark against urban availability	Ongoing from 2020	ICT leads and Heads of service	Service delivery operational reporting	Quarterly Reports to Project Board as above
OP8	Social cohesion and inclusion across the region to sustain communities		15 years				Monitor population levels, employment and migration from rural communities	Ongoing from 2020	Economic development officers, Community officers		Quarterly Reports to Project Board as above
OP9	Stimulate economic growth by enhancing opportunities for employment	Business start up reports, inward investment by digital intensive industries	15 years				Monitor employment records, job creation and number of business start ups	Ongoing from 2020	Economic development officers, Community officers		Quarterly Reports to Project Board as above
OP10	Innovation and ensuring the region is at the forefront of new service roll out and delivery	On-going monitoring of service availability from telecommunications industry	15 years				Liaise with wireless service providers. Monitor service availability and applications against national benchmarks	Ongoing from 2020	ICT leads, Economic Development	Surveys	Quarterly Reports to Project Board as above
OP11	Environmental benefits (reduced transport congestion and lowered carbon footprint)	Transport monitoring reports and surveys	15 years				Survey commuting patterns; Monitor congestion	Ongoing from 2020	Transport Planning	Transport monitoring reports	Quarterly Reports to Project Board as above

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BENEFITS REGISTER

Project Name: **Digital Infrastructure** Date: Aug-20
 Responsible Officer/Register Owner: xxxxx

This Benefits Register will be reviewed regularly and will form part a standing Agenda on the Project Board.

Note: All the benefits in the Strategic Case and Economic Case must be accounted for within the Benefits Register - this includes the Economic Appraisal for the Preferred Option.

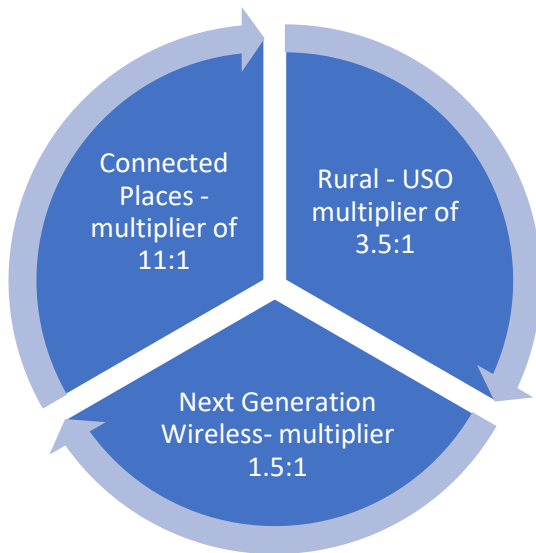
This Register should cover all benefits - Financial, Non-Financial and Qualitative identified during the Implementation and Operational Phases of the project.

Benefit No:	Benefit Description	Benefit Target	Targeted End Achievement Date	Year Time Value			Data Sources	Activities Required/Critical Dates	Responsible Officer/Who will deliver it	How will it be evidenced	Reporting
				5yrs	10 yrs	15yrs					
(unique no. in this register)	(including enabling project or activity)	Measurable Target - Expected level of change	Specific date when will the benefit be realised	(what benefits will be delivered over the 5yr, 10yr, 15yr period)			(what aspect of the project will give rise to the benefit - to facilitate monitoring)	(to secure the benefit)			
OPERATIONAL PHASE											
QUALITATIVE INDICATORS											
OP1	Digital transformation is accelerated in the Public Sector	Acceleration in transformation beyond current planning	15 years				Authority annual reports. Authority strategy documents	Ongoing from 2020	Authority ICT lead	Monitoring progress in transformation and interviews with digital leads	Authority reporting
OP2	Access to Public Services via digital services increases and improves	More access is made to wider services through digital channels	15 years				Authority annual reports. Authority strategy documents	Ongoing from 2021	Authority ICT lead	Monitoring progress in transformation and interviews with digital leads	Authority reporting
OP3	Access by rural populations to Public Services increases and improves	More access is made to wider services through digital channels	15 years				Authority annual reports. Authority strategy documents	Ongoing from 2021	Authority ICT lead	Monitoring progress in transformation and interviews with digital leads	Authority reporting
OP4	Loneliness and isolation reduces through digital access to services and information	General reporting of condition is reduced	15 years				Authority annual reports. Authority strategy documents	Ongoing from 2021	Authority ICT lead	Monitoring progress through Social Services	Authority reporting
OP5	Better integration across digital platforms	Single versions of digital truths that is mapped across many digital platforms	15 years				Authority annual reports. Authority strategy documents. Industry led integration of information sources and integrated applications	Ongoing from 2021	Industry players and Local Authority service providers	Ease of use across digital platforms and applications	Authority reporting
OP6	Access to remote health services	Telemedicine	5 years				Health Service reports and analysis of patient access	Ongoing from 2021	Health Trusts & GPs	More acceptance and use of digitally enabled remote health services	Authority reporting
OP7	Time savings in accessing goods and service for the public and SMEs	More access is made to wider services through digital channels	5 years				Authority reports and business reports	Ongoing from 2021	Industry players and Local Authority service providers	Monitoring progress in transformation and interviews with digital leads	Authority reporting
OP8	Access to educational material through digital infrastructure	More access is made to wider services through digital channels	5 years				Authority annual reports. Authority strategy documents	Ongoing from 2021	Education authorities	Monitoring progress in transformation and interviews with digital leads	Authority reporting

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Annex 4

Economic Impacts



Research into the benefit/cost ratios that apply to the three main headings vary for different interventions across different deployments of digital infrastructure, but all are positive in their impact. Considering the three main headings and applying a conservative aggregation interpretation of current figures to make them directly appropriate, the following applies;

Connected Places 11:1 multiplier – extrapolation from Regeneris Report – The Economic Impact of Full Fibre Infrastructure in 100 Towns and Cities.

Rural 3.5:1 multiplier – UK Govt case for USO intervention & Superfast Cymru assessment

report.

Next Generation Wireless 1.5:1 multiplier – EC report on 5G impacts and TeliaSonera Inst, benefits of 4G Sweden and Estonia.

It should be noted that all three Digital Infrastructure deployment types above are complimentary and importantly amplify each other. Strong and widespread fibre deployments is a precursor for 4G-Adv and 5G, while many Use Cases are enhanced by the fact that they are able to deliver through both fixed and mobile applications and services.

It should be noted that there is so far a small body of evidence around the impact of 4G⁵⁵ and none related to 5G, simply because in the case of 4G it is a relatively new technology⁵⁶ and only **adds mobility** to the services available through fixed and WiFi services. For 5G, despite the hype, there is no concrete evidence as yet and it will be several years before research is available on this topic. For this reason, a very conservative multiplier has been adopted for

⁵⁵ Research in Australia gave a significant impact to 3G/4G availability, although not measured as a direct economic impact. The figures indicate a 10% uplift in productivity for businesses due to mobile broadband.
https://www.acma.gov.au/~media/Numbering%20and%20Projects/Report/pdf/Economic%20impacts%20of%20mobile%20broadband_Final%20pdf.pdf

⁵⁶ EE Provided a report estimating 0.7% uplift in GDP over the life of 4G mobile broadband.
https://ee.co.uk/content/dam/everything-everywhere/Newsroom/PDFs%20for%20newsroom/Capital%20Economics%20Report_ImprovingConnectivityNov2014.pdf

the Next Generation Wireless. If the hopes for 5G⁵⁷ do come to fruition, then the multiplier here is understated⁵⁸ by a factor of ten.

In all cases, the digital infrastructure deployment supported by SBCD will be of 'production standard', that is, it will be deployed as a long-term investment and service provider. It will deliver digital infrastructure that is fully integrated into the commercial base of connectivity in the region and not on the basis of short-term usage and impacts. In delivering this, it will be imperative to work with the private sector service providers for both fixed line and mobile operators and to integrate the Digital Infrastructure interventions with their networks and commercial operation.

Connected Places Case:

In the Urban /Economic Development Zones segment the Regeneris⁵⁹ analysis model has assessed the direct and indirect economic impacts of full fibre infrastructure over 100 UK cities. Specifically, in the Swansea Bay region, the modelled impacts of the direct benefits are >£200m against a projected investment for the region of £17m, a multiplier of 11. In fact, Swansea City itself has a multiplier of 20. These benefits are broken down as follows;

- Productivity improvements to businesses - 8%
- Start-ups – 9%
- Innovation - 8%
- Network build – 19%
- Enhanced teleworking and worker flexibility – 11%
- Household benefits – 45%

This assumes a build up as follows;

- services enabled: 1 year after the start of network build
- 35% adoption rate reached: after 5 years
- productivity benefits achieved: 1 year after adoption
- innovation benefits realised: 4 years after adoption.

Next Generation Wireless

There is little evidence available for the direct impact for better 4G coverage and as yet none for 5G, as it has not been deployed at this time in more than testbeds. Despite this, the general opinion of the industry is that 4G and 5G coverage is essential for both their general

⁵⁷ Deloitte report to UK Govt.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/714112/The_impacts_of_mobile_broadband_and_5G.pdf

⁵⁸ General support given in European Commission Report: Identification and quantification of key socio-economic data to support strategic planning for the introduction of 5G in Europe.

https://connectcentre.ie/wp-content/uploads/2016/10/EC-Study_5G-in-Europe.pdf

⁵⁹ Regeneris report on the Economic impact of Full Fibre

<https://www.cityfibre.com/wp-content/uploads/2018/03/The-Economic-Impact-of-Full-Fibre-Infrastructure-in-100-UK-Towns-and-Cities-12.03.18.pdf>

customer base and also industry and the service sector as a whole. Work undertaken for the EU in relation to 4G services being made widely available in Sweden and Estonia, has estimated a benefit ratio of 1.5:1. Bearing in mind the very large impacts of deploying full fibre, it must be remembered that 4G in particular is only enhancing benefits further due only to its mobility, not by adding new services. In contrast, 5G opens significant opportunities for new services and innovation.

Rural

A direct comparator in this case is the work undertaken by Ofcom to determine the business case for the introduction of a Universal Service Obligation⁶⁰ so that every premise in the UK has connectivity at 10Mbps or above. This directly compares with the rural areas of the region. In their economic assessment, a benefit multiplier of 3.4-3.6:1 is set out. Independent research⁶¹ for BT undertaken to assess the impact of investment in rural connectivity for Northern Ireland gave the following;

Benefit Category	Absolute Benefit	Benefit Multiple (relative to cost)
Productivity Growth	£50m – £410m	0.3 – 2.7
Employment Benefits	£290m - £890m	1.9 – 5.9
Teleworking	£40m	0.3

Table 47 - Rural Connectivity Investment Impacts in NI

In effect this gives a range of benefit multiplier of between 2.5 and 8.9. However, as the economic impact undertaken for the USO is very recent and is more conservative, the 3.5:1 figure is preferred for the rural Digital Infrastructure.

Taking all three of the headings, it should be noted that all of the above are additive, that is, they offer integrated connectivity solutions that will enable wider services and innovation.

⁶⁰ <https://www.ofcom.org.uk/phones-telecoms-and-internet/advice-for-consumers/broadband-uso-need-to-know>

A limit of £3,400 has been placed on any single connection, if the cost of connectivity is in excess of this, then a contribution will be required. It is also limited to customers who will NOT benefit from another publicly funded programme.

⁶¹ The analysis was the delivery of 30Mbps services across rural areas in NI, DotEcon report for BT

Annex 5

Success Factor Analysis Framework – Update to headings and review

The tables reflect the inputs from workshops held with SBCD working groups during workshops. The assessment is identified by the normal Red/Amber/Green arrangement, with the best choice represented by having the most green boxes.

Rural Options	Aligned to Strategy	Economic Impact	Achievability	Affordability	Attraction to Supply Chain	Programme Compatibility	Risk
<i>Do Nothing</i>	Does not meet any strategic plans from WG, Authorities or SBCD	Has No impact	Cannot be delivered as other intervention programmes cross over	Good as No Costs involved	Will drive supply chain to other regions and negatively impact other full fibre and 5G ambitions	Good as it would not interfere	Highest risk is terms of achieving the digital infrastructure goals
<i>Supply Side Engagement</i>	Corresponds to previous and current efforts	Historically not provided strong or measurable impacts	Corresponds to previous and current efforts	Low Cost - Small team	Suppliers respond to contact and sharing of data, but not a strong influencer of their objectives	Allows lobbying on both programme teams and supplier to create harmonised outputs	Low risk as based on influencing, not delivering
<i>Demand Stimulation</i>	Works through multiple streams for training and innovation support	Targeted stimulation gives higher success rates and allows broad brush sectorial improvements as well	Requires the use of existing skills, supported by supplier innovation actions, strong likelihood of success	Low Cost - Small team	Supply Chain investment cases are driven by revenue forecasts, improving the market size is positive for all	Will allow added leverage to interaces with other funding programmes and evidence to improve investment	Low risk as based on influencing, not delivering
<i>SBCD Procurement</i>	Will meet strategic goals	Investment will drive additional investment from the private sector, generally improves GVA	No guarantee of private sector take-up or additional investment	Large scale investments required	Reduces deployment costs, but does not solve the equation on low revenues for large investments	Other programmes are intervention funds to encourage the supply chain to action, not to support authority builds	Constant risk suppliers will not utilise any infrastructure offered
<i>Community Programmes</i>	Corresponds to previous and current efforts	Fragmented approach with limited take-up, localising any impact	Historically, very problematic as skills to execute do not exist in small communities	Fragmented approach removes any economies of scale	Fragmented approach removes any economies of scale for suppliers	Could be used to support other intervention programmes, but linkages not in place	Low numbers of successful deployments probable so high risk of limited success

Table 48 - Rural Options Assessment. Preferred choice, 'Demand Stimulation'

Connected Places	Aligned to Strategy	Economic Impact	Achievability	Affordability	Attraction to Supply Chain	Programme Compatibility	Risk
<i>Do Nothing</i>	Does not meet any strategic plans from WG, Authorities or SBCD	Has No impact	Cannot be delivered as other intervention programmes cross over	Good as No Costs involved	Will drive supply chain to other regions and negatively impact other full fibre and 5G ambitions	Good as it would not interfere	Highest risk is terms of achieving the digital infrastructure goals
<i>Supply Side Engagement</i>	Corresponds to previous and current efforts	Historically not provided strong or measurable impacts	Corresponds to previous and current efforts	Low Cost - Small team	Suppliers respond to contact and sharing of data, but not a strong influencer of their objectives	Allows lobbying on both programme teams and supplier to create harmonised outputs	Low risk as based on influencing, not delivering
<i>SBCD Asset Investment</i>	Aligns with UK, WG and SBCD. LFFN funding is directly equivalent	Investment will drive additional investment from the private sector, generally improves GVA	Private sector partnerships and investment are pre-requisite, success more likely	Leveraged investment with private sector. Costs also amortised over longer term (15y)	Supply Chain investment cases are more favourable due to anchor tenant model	Will allow added leverage to interaces with other funding programmes and evidence to improve investment	Timescales and level of invstment lead to higher risks, although many risks are shared with the supply chain
<i>SBCD Procurement</i>	Will meet strategic goals	Investment will drive additional investment from the private sector, generally improves GVA	No guarantee of private sector take-up or additional investment	Large scale investments required, but revenue opportunities from rental of assets	Builders of the assets would be positive, but they do not share any ongoing commercial usage risks	Would be seen as an in-fill to other programme funding rather than a competitor	Constant risk service providers will not utilise any infrastructure offered

Table 49 - Connected Places Assessment. Preferred Option, 'Supply Side Engagement'

Next Generation Wireless		Aligned to Strategy	Economic Impact	Achievability	Affordability	Attraction to Supply Chain	Programme Compatibility	Risk
Do Nothing	Does not meet any strategic plans from WG, Authorities or SBCD	Has No impact	Suppliers will deploy 5G in Dense Urban anyway	Good as No Costs involved	Will drive supply chain to other regions and negatively impact other full fibre ambitions	Good as it would not interfere	Highest risk is terms of achieving the digital infrastructure goals	
	Meets some of the strategic intents of UK, WG and SBCD	Unlikely to secure a wide deployment of services outside city centres over 5 years	Suppliers are in engagement mode as they try to build their own business case for 5G deployment	Low Cost - Small team	Suppliers respond to contact and sharing of data, but not a strong influencer of their objectives	DCMS 5G programmes likely to be aligned to SBCD strategy	Low risk as based on influencing, not delivering	
	Would support all UK, WG, SBCD strategic intents around broadband and mobile broadband	Would offer a broad set of opportunities to stimulate uptake and innovation	Local Authorities highly recommended to implement, some central support available	Low Cost - Small team	Supply Chain investment cases are driven by revenue forecasts, reducing their costs of deployment is positive	Would not guarantee the delivery of 5G or IoT services within SBCD, but would be directly aligned to DCMS 5G funding	Low risk as based on influencing and cost reductions for the suppliers, no real delivery risks	
	Will meet Ofcom, DCMS and WG strategic goals	Coverage extensions only needed in more rural environments. Better this was left to fixed broadband to achieve	Direct funding would be problematic under State Aid as there are four MNOs	Depending on intervention model, a site can cost up to £200k to build and operate	Reduces deployment costs, but does not solve the equation on low revenues for large investments	There are no programmes currently in place	Constant risk suppliers will not utilise any infrastructure offered	
	Early adoption of 5G and IoT is a fundamental strategic aim for UK, WG and SBCD	Limited impact as deployments will be PoC rather than industrial scale roll-outs	Supply side would do all deployment, therefore low risk of failure to deliver the services. Uptake is a different issue	Joint funding with private sector and time-limited exposure	Supply side is seeking attractive Use Cases so is willing to engage and jointly innovate	Future programmes for 5G are imminent and these are likely to be closely aligned	Low numbers of successful deployments probable so medium level of success likely	

Table 50 - Next Generation Wireless Assessment. Preferred Option, 'Undertake FTIR Guidance'

Annex 6

Summary of Financial Analysis – Assumptions and Sources

Financial Overview

Figure 1 presents a summary of the proposed budget for Digital Infrastructure Stream, segmented between Capital and Revenue Expenditure (Opex)

Stream	Proposed Budget	Capital	Revenue over 5 years
Rural	£25.5m	£20m	£5.5m
Connected Places	£20.0m	£19.5m	£0.5m
Next Generation Wireless	£9.5m	£7.5m	£2.0m
TOTAL	£55.0m	£47.0m	£8.0m

Numbers were derived from detailed bottom up cost modelling of addressing the requirements and needs of each of the respective streams. In the case of the rural stream the focus was to enhance broadband service provision in those areas where there is an absence of broadband provision or at a speed beneath a 30Mbps download. In the Connected Places the programme seeks to prioritise full fibre provision into the key urban centres and economic development zones across the region. The proposed budgets address these requirements. However, there is flexibility and the reach and depth of both programmes could be increased. This gives the programme flexibility to accommodate new funding sources. In contrast the Next Generation Wireless programme is targeted at the partial funding of key next generation wireless technology projects, which can also be scaled.

The key assumptions are as follows:

i) Rural

In the rural programme we have the following activities selected from the long list of options:

- Option 2; Supplier Engagement; £0.5m revenue budget (See Economic Case Option 2 – Table 23. and description in Option 2 table). The £0.5m is comprised of £100k/annum over a five-year period. Tasks to be undertaken include;
 - Briefing industry on regional plans and requirements
 - Lobby for inward investment
 - Promotion of region as test bed for new technologies and services
 - Arranging site visits, events etc
 - Providing single interface between industry and the regional public sector bodies and a point of contact for issues such as planning, way leaves etc
 - Co-ordination of programmes with UK Govt and Welsh Government
- Option 3; Demand Stimulation; £5m revenue budget (See Economic Case Option 3 – Table 23 and description in Option 3 table) . SBCD establish a local programme to increase user awareness and adoption of digital services across the entire population of SMEs and households. Activities would include:
 - PR and promotion
 - Establishment of case studies of benefits and usage
 - Engagement with local stakeholders such as business groups, community organisations etc
 - Events
 - Promotion of connection voucher schemes of UK and regional Govt
 - Engagement with suppliers
 - Engagement with local businesses and residents
 - Support and training programmes
 - Use of social media
 - Web based support
 - Provision of technical, commercial and legal support to community groups
- Option 4; In-fill procurement; The estimated gap in coverage in the SBCD following the interventions from Superfast Cymru and the Universal Obligation Fund is estimated at up to 3-5000 premises (see Economic Case; Option 4 SBCD In-Fill Procurement). As these are the most outlying rural sites, we have a cost per line of £5000 based on the remaining unserved premises in BDUK. If we take a mid-range figure of the estimated gap i.e. 4000 lines, we have a capital requirement of £5000 x 4000 = £20m.

ii) Connected Places

Detailed bottom up modelling was undertaken to derive the Total Capital Cost to link the public sector sites in the key development zones. As stated in page 88 a blend of Options 3- an investment in public sector owned duct infrastructure and Option 4, a procurement of commercial owned full fibre infrastructure should be undertaken. The blend of these two options will depend on supplier appetite to be defined in market testing with a total budget

of ceiling of £20m; £19.5m for network build and £0.5m to cover procurement and management costs.

In order to derive the costs a bottom up cost model was commissioned from their consultancy FarrPoint. Public sector site data was input to the model. The following approach was then taken. This model has been used by DCMS on a range of LFFN projects. Key assumptions are;

- The WAN requirements of the authorities will result in the build of a new duct and fibre infrastructure to serve all the sites centrally located Points-of-Presence (PoPs).;
- For the purpose of modelling, the PoPs are taken to be existing BT exchanges currently used to deliver the Council WAN connectivity
- A GIS tool was used to model an example network footprint, establish the routes over the UK road network, and capture route distances.
- The cost of the modelled network was estimated using standard industry benchmarks for civil and fibre infrastructure including: the cost of dig on roads, footpaths and soft verge including reinstatement, sourcing and installation of chambers, subduct, fibre cables, fibre joints, and including fusion splicing.
- For all sites, standard assumptions have been used to estimate a cost for work on the curtilage of each site including provision and installation of a small chamber and small splicing enclosure, a 20m soft dig outdoor with installation of a duct and sub-duct between the chamber and the building entry point, 10m internal cabling installation in existing containment, installation of a 4 fibre cable from external chamber to fibre termination point, termination of fibre on an existing rack and fibre patch panel or on a wall box.
- The cost model assumes a typical breakdown of work on road, footpath and grass verge.

iii) Next Generation Wireless

In the Next Generation Wireless stream, we have the following activities selected from the long list of options:

- Option 3 ; Will be executed under central SBCD mandate and management with a cost cap of £2.0m (see Economic Case Option 3 page 75) The thrust of the Telecoms Review and the Welsh Mobile Action Plan is to make it easier and cheaper for mobile operators to expand coverage and introduce new services such as 5G and IoT. Fundamentally, this requires SBCD, along with support from local authorities in allowing their asset usage and in addition streamlining the planning and implementation processes.
- Option 5: Do Something: Support for Specific 5G/IoT Projects (See Economic Case Page 79): Note the cost of the team to manage these projects is taken to be covered under Option 3. There is a requirement to for 5G/4G+ augmentation to SBCD projects and the scope of these and this will be undertaken via the procurement process. The public funding will be constitutes R&D, training, knowledge transfer, network support for projects. Private funding will be in form of R&D, infrastructure and network management.

Summary of Investment Sources and Benefits

The table below summarises the budget spend and investment sources along with associated benefits

Stream	Total Budget Spend (Revenue and Capital over 5 year)	Direct SBCD Capital Contribution	Direct SBCD Revenue Contribution	Other Public Sector Contribution	Direct Commercial Contribution	Additional Commercial Sector Pull through Investment	GVA Uplift over 15 years from Budget Investment
Rural							
Option 2; Supplier Engagement	0.5 (Note 1)	0.0	0.5	0.0	0.0	0.0	
Option 3: Demand Stimulation	5.0 (Note 2)	0.0	1.5	3.5	0.0	28.9	17.5
Option 4: In-fill Procurement	20.0 (Note 3)	6.0	0.0	10.0	4.0	20.0	70.0
Connected Places							
Options 3/4 Duct Investment /Procurement	20.0 (Note 4)	12.0	0.5	0.0	7.5	70.0	220.0

Next Generation Wireless							
Option 3; Infrastructure Review	2.0 (Note 5)	0.0	2.0	0.0	0.0		
Option 5: Support for Specific Projects	7.5 (Note 6)	2.5	0.0	0.0	5.0	3.0	11.3
TOTAL	55.0	20.5	4.5	13.5	16.5	121.9	318.8

Costs contributions

The key budgetary cost assumptions made are as follows:

Rural

- Note 1: All supplier engagement costs are borne by SBCD. See Option 2; Supplier Engagement; £0.5 revenue Budget (See Economic Case Option 2 – Table 23. and description in Option 2 table) The £0.5m is comprised of £100k/annum over a five-year period.
- Note 2: Demand stimulation costs are split between central SBCD and other public sector contributions. It should be noted that some of the local authorities already have their own staff and resources to undertake this task. In addition, some central demand stimulation activities will be borne by DCMS as part of its Rural Connectivity programme
- Note 3: Based on other projects rural infill investment is split as follows:
 - A 20% contribution from commercial operators based on BDUK experience in rural programmes such as Digital Scotland. This will be verified with Superfast Cymru
 - A 50% contribution for central and regional govt schemes, notably Rural Gigabit Connectivity Fund and Superfast Cymru. This is based on the region capturing £10m out of the allocated national budget of £200m from DCMS
 - 30% from SBCD. This is the balance of costs to address the requirements.

In addition, it should be noted that that it is central Govt policy that every premise will have a legal right to access broadband speeds of at least 10 Mbps

<https://www.gov.uk/government/news/high-speed-broadband-to-become-a-legal-right>

At the time of writing the operation of this funding it not known but it is likely that the region will benefit from further inward investment under this scheme. In addition, SBCD will be well placed to enhance the efficiency of this scheme in the region through its central co-ordination and demand stimulation activities

Connected Places

- Note 4: The split in costs between the commercial sector and SBCD will be determined during procurement. It is likely that the initial of direct commercial investment will be greatest in central Swansea. In other areas it will require greater public sector contribution.

The split of costs in LFFN projects of this nature have shown that that the public sector bears much of the cost of the initial project (typically 60%). This is because the initial project is solely to connect public sector sites due to state aid constraints. However, the commercial sector does acknowledge a contribution to the cost as it is able to commercial the assets. In subsequent pull through investment, the commercial sector bears the full cost as it is based on build out to homes and business premises.

If the SBCD is directly procuring its own duct infrastructure to own and use it will bear all costs. If it is procuring a right to use over commercially owned infrastructure the commercial sector will bear some of the initial investment costs as it is able to commercialise these assets.

Based on this experience in other national programmes of this nature we forecast that SBCD invests £12m of capital plus an additional £0.5m to cover procurement and management overheads.

Next Generation Wireless

- Note 5: SBCD bears costs of compliance to infrastructure review
- Note 6: SBCD makes a 33% capital contribution to specific projects; In order for the effectiveness of the envisaged SBCD projects to be optimized there is a requirement to augment their access to wireless infrastructure and the scope of this and this will be undertaken via the procurement process. In addition, the programme will also work with the mobile industry to identify other key projects of benefit to the region. The public funding contribution will consist of R&D, training, knowledge transfer, network support for projects. Private funding will be in form of R&D, infrastructure and network management.

Pull Through Commercial Investment

Rural

- Demand stimulation activities increase NGA adoption by 17000 lines. This will be across the region, an industry benchmark cost per line of £1700 has been made. This is the benchmarked from Digital Scotland. These investment costs will be borne by the commercial sector.
- In the in-fill procurement Openreach is likely to make an initial contribution of up to 20% of project costs. A subsequent second wave of commercial investment will arise as unserved premises are connected in the areas and SBCD demand stimulation activities increase take up and demand. There are currently 23,000 white premises. If the SBCD and DCMS programmes establish FFIB in most of these locations and there is a 30% adoption rate, we can expect around 7000 new FTTP customers. At £3500/line the pull through investment will be >£20m.

A good example of the benefits of a programme is superfast Cornwall

<https://www.superfastcornwall.org/wp-content/uploads/2018/07/Superfast-Evaluation-Report-June-2018-Final-Issued-190618.pdf>

Up to March 2018 the Superfast programme delivered an estimated 3,490 new FTE jobs and a GVA uplift of £136,900,000. It also safeguarded 4,190 FTE jobs and £166,800,000 of GVA.

Connected Places

In Connected Cities experience in cities such as Aberdeen has shown a pull through multiplier. For example, in Aberdeen an initial £6m anchor tenancy project by Aberdeen City Council leveraged a further £40m of investment by City Fibre and Vodafone (<https://investaberdeen.co.uk/index.cfm?topNav=success-stories&subNav=case-studies&subsubNav=cityfibre-building-aberdeen%E2%80%99s-full-fibre-future>).

A similar benchmark is the recently announced programme of investment by City Fibre. City Fibre has core metro networks in 42 UK towns and cities, which will be extended to

customer premises in order to deliver consumer FTTP services. CityFibre estimates that the total capex costs of this deployment will be in the region of £500-£700m.

Based on £12m of SBCD investment, a long term pull through investment contribution of >£70m can be expected.

Next Generation Wireless

In June 2015 the UK Govt published its definitive report on the impact of Mobile Broadband and 5G;

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/714112/The impacts of mobile broadband and 5G.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/714112/The_impacts_of_mobile_broadband_and_5G.pdf)

'There is a clear consensus that mobile broadband technologies have brought significant benefits for consumers, businesses and the wider economy. Studies show that mobile broadband is associated with positive impacts for the economy, such as higher GDP and employment. Underlying this effect are the investments made by mobile network operators and the impacts these investments have had throughout the supply chain, as well as productivity improvements from employees having access to more advanced mobile connectivity. Additional impacts on consumers include benefits from access to a range of innovative apps and services powered by mobile broadband.'

Impact Assessment - First Stage

It is essential that all initiatives undergo a first stage impact assessment to identify relevance to equalities and the Welsh language as well as an evaluation of how the proposal has taken into account the sustainable development principle (the five ways of working); an incorrect assessment could ultimately be open to legal challenge.

The first stage is to carry out a short assessment to help determine the need to undertake a more in-depth analysis (the second stage).

Relevance will depend not only on the number of people/service users affected, but also the significance of the effect on them.

When completing the first step you must have regard to the following:

- Does the initiative relate to an area where important equality issues have been, or are likely to be, raised? (For example, funding for services to assist people who are victims of rape/sexual violence or individuals with particular care need; disabled people's access to public transport; the gender pay gap; racist or homophobic bullying in schools)
- Is there a significant potential for reducing inequalities, or improving outcomes? (For example, increasing recruitment opportunities for disabled people).
- Does the initiative relate to instances where opportunities to use the Welsh language are likely to be affected or where the language is likely to be treated less favourably? (For example, increase the number of Welsh speakers moving from/to a certain area; closing specific Welsh language services or put those services at risk services;
- Does the initiative relate to the improvement of economic, social, environmental and cultural well-being? To what extent does the initiative prevent things getting worse? (For example, funding for services to assist in cultural well-being; changes in policies that promote independence and/or assist carers)

1. Provide a description and summary of the initiative.

Identify which service area and directorate has responsibility for the initiative.

2. Identify who will be affected by the initiative.

If you answer **Yes** to service users, staff or wider community continue with the first stage of the assessment

If you answer **No** to service users, staff or wider community or **Yes** to 'Internal administrative process only', go to **Question 5 – sustainable development principle**.

3. Using relevant and appropriate information and data that is available to you think about what impact there could be on people who share protected characteristics; whether they are service users, staff or the wider community.

Some things to consider include:

- transport issues
- accessibility
- customer service
- cultural sensitivity
- financial implications
- loss of jobs

Definitions of impacts (either positive or negative):

- High – likely to be highly affected by the initiative
- Medium - likely to be affected in some way
- Low - likely to be affected by the initiative in a small way
- Don't know - the potential impact is unknown

You **must** provide reasons, and indicate what evidence you used, in coming to your decision.

4. Using relevant and appropriate information and data that is available, think about what impact there could be on opportunities to use the Welsh language and in treating the language no less favourably than English.

Definitions of impacts are the same as in **Question 3**.

The classification 'Don't Know' should be categorised as 'High Impact' in both questions 3 & 4.

5. Consider how the initiative has embraced the sustainable development principle in accordance with the Section 7c of the Well-being of Future Generations Act 2015.

Give details of the initiative in relation to the 5 ways of working:

- **Long term** - how the initiative supports the long term well-being of people
- **Integration** - how the initiative impacts upon our wellbeing objectives
- **Involvement** - how people have been involved in developing the initiative
- **Collaboration** - how we have worked with other services/organisations to find shared sustainable solutions;
- **Prevention** - how the initiative will prevent problems occurring or getting worse

6. The most appropriate statement must be selected (and the relevant box ticked) based on the first stage of the assessment and an explanation of how you have arrived at this decision must be given.

In addition a summary of the how the initiative has embraced the sustainable development principle must also be included.

Where the first stage of the assessment indicates that a more in-depth analysis is required the second stage of the assessment will need to be completed and this will need to be started immediately.

A first stage assessment must be included as a background paper for all Cabinet/Cabinet Board/ Scrutiny Committee Reports.

Where the first stage assessment is completed by an accountable manager it must be signed off by a Head of Service/Director.

Impact Assessment - First Stage

1. Details of the initiative

Initiative description and summary: Swansea Bay City Deal Digital Infrastructure Project
Service Area: Property and Regeneration
Directorate: Environment

2. Does the initiative affect:

	Yes	No
Service users	X	
Staff		X
Wider community	X	
Internal administrative process only		X

3. Does the initiative impact on people because of their:

	Yes	No	None/ Negligible	Don't Know	Impact H/M/L	Reasons for your decision (including evidence)/How might it impact?
Age		X				
Disability		X				
Gender Reassignment		X				
Marriage/Civil Partnership		X				
Pregnancy/Maternity		X				
Race		X				
Religion/Belief		X				
Sex		X				
Sexual orientation		X				

4. Does the initiative impact on:

	Yes	No	None/ Negligible	Don't know	Impact H/M/L	Reasons for your decision (including evidence used) / How might it impact?
People's opportunities to use the Welsh language		X				
Treating the Welsh language no less favourably than English		X				

5. Does the initiative impact on biodiversity:

	Yes	No	None/ Negligible	Don't know	Impact H/M/L	Reasons for your decision (including evidence) / How might it impact?
To maintain and enhance biodiversity	X					The programme will be the subject of planning application(s) where biodiversity will be fully considered and issues will be fully mitigated.
To promote the resilience of ecosystems, i.e. supporting protection of the wider environment,	X					As above.

such as air quality, flood alleviation, etc.						
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6. Does the initiative embrace the sustainable development principle (5 ways of working):

	Yes	No	Details
Long term - how the initiative supports the long term well-being of people	X		The project will balance short term needs with safeguarding the long term needs - Digital infrastructure is a long term investment that enables transformative actions at many levels
Integration - how the initiative impacts upon our wellbeing objectives	x		Digital infrastructure is a critical enabler across many sectors and makes integration simpler and more effective.
Involvement - how people have been involved in developing the initiative	X		Part of the project is to deliver digital inclusion, a fundamental to opening opportunities for involvement across the widest breadth of participants
Collaboration - how we have worked with other services/organisations to find shared sustainable solutions	X		Digital collaboration opens significant new opportunities to involve people and organisations in working together.
Prevention - how the initiative will prevent problems occurring or getting worse	X		Digital service delivery represents an opportunity to improve services and a stable platform for future change

7. Declaration - based on above assessment (tick as appropriate):

A full impact assessment (second stage) is not required	<input checked="" type="checkbox"/>
Reasons for this conclusion	
The project will provide opportunities and have no impact on equalities, welsh language or biodiversity.	

A full impact assessment (second stage) is required	<input type="checkbox"/>
Reasons for this conclusion	

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	Name	Position	Signature	Date
Completed by	Julia Lewis	European & Strategic Funding Officer	J.Lewis	22.09.2020
Signed off by	Nicola Pearce	Director of Environment &		

		Regeneration		
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Cyngor Castell-nedd Port Talbot
Neath Port Talbot Council

NEATH PORT TALBOT COUNCIL

CABINET

21st October 2020

Report of the Director of Environment and Regeneration Nicola Pearce

Matter for Decision

Wards Affected: All

Environment (Wales) Act 2016 – Consideration of the Neath Port Talbot Biodiversity Duty Plan (BDP) 2017 Implementation Report and the publication procedures to be implemented.

Purpose of the Report

To consider and agree the Biodiversity Duty Plan (BDP) 2017 Implementation Report and the publication procedures to be implemented.

Executive Summary

The Environment (Wales) Act 2016 introduced a duty (under Part 1, Section 6 (7), referred to as the Biodiversity and Resilience of Ecosystems duty or in short ‘the S6 Duty’) on public authorities (including the Council) to maintain and enhance biodiversity, thereby promoting the resilience of ecosystems in the exercise of its functions.

The S6 Duty requires formal demonstration of compliance. The Council was initially required to prepare and publish a plan setting out how it intended to comply with the Duty. Accordingly, in December 2017 the Council published its first iteration of the Neath Port Talbot Biodiversity Duty Plan (BDP). Following publication, the Act also requires the Council to report at regular intervals on its implementation – i.e. covering what it has done to comply with the Duty and to set out recommendations on whether the published BDP should be amended and/or updated.

This report therefore seeks Member approval of the first BDP Implementation Report and the publication procedures to be implemented.

Members should note that once approved, the recommendations of the BDP Implementation Report will be incorporated into a revised BDP which will supersede the 2017 Plan. This will subsequently be reported to Members at the end of the calendar year.

Background

In 2016 the Environment (Wales) Act introduced a duty (the S6 Duty) on public authorities to maintain and enhance biodiversity. The Council is therefore required by the Act to prepare and publish a plan setting out how it intends to comply with the Duty. To comply with the S6 Duty the Council should embed the consideration of biodiversity and ecosystems into their early thinking and business planning, including any policies, plans, programmes and projects, as well as their day to day activities.

In December 2017, the Council published its first Biodiversity Duty Plan (BDP)¹ outlining the natural resources that exist within Neath Port Talbot, why they are so special and what activities were already underway to protect them. It also set out how the BDP works and the mechanisms for delivery, along with detailed actions to be achieved and milestones for reporting.

Following publication of the BDP, the Act requires the Council to publish an implementation report at regular intervals on what has been done to comply with the S6 Duty in order to ascertain what has been achieved, what needs to be improved and to make any revisions and improvements to the published BDP. The Implementation Report is required to be published online, with a link sent to the Welsh Government (WG).

NPT Biodiversity Duty Plan 2017 Implementation Report

The 'BDP 2017 Implementation Report' is presented in full in **Appendix 1**. The report monitors the actions from initial publication up to financial year end 2020 – i.e. December 2017 to 31st March 2020.

The Act requires the Council to publish a report on what they have done to comply with the S6 duty before the end of 2019 and before the end of every third year thereafter. WG guidance on producing implementation reports was only published in November 2019 which prevented the

¹ NPT Biodiversity Duty Plan (BDP) 2017 - <https://www.npt.gov.uk/media/9417/nptcbc-biodiversity-duty-plan.pdf?v=20190125155137>

Council from publishing its report by December 2019, further delay occurred as a result of the COVID-19 pandemic.

Moving forward, in order for the Council to monitor the actions within the BDP in line with grant funding streams and to allow for political reporting it is proposed that the monitoring timeline aligns with financial years. Accordingly, the Council will monitor the actions of the next BDP from 1st April 2020 to 31st March 2023 and submit the Implementation Report to WG by October 2023.

The S6 Duty aims to ensure that the consideration of biodiversity becomes an integral part of the decisions and actions that public authorities take. In late 2019, WG published guidelines² on how to report on BDPs. In accordance with these guidelines, the BDP Implementation Report sets out progress on individual actions, along with recommendations of how to move each of the actions forward.

The key outcomes, notable barriers and new future actions outlined in the Implementation Report are summarised below.

Key Outcomes

- An action to deliver against the Biodiversity Duty has been built into the **Corporate Plan**.
- The Council's **Integrated Impact Assessment (IIA)** considers the Biodiversity Duty and requirements to inform and ensure effective decision making and compliance. A summary of the IIA is required within the Committee Report template.
- There is **improved collaborative working with wider departments**, which has been supported by the employment of a Graduate Ecologist to provide survey and in-house consultancy services, resulting in **early engagement in projects and cost savings**.
- The Council **adopted its Biodiversity and Geodiversity Supplementary Planning Guidance (SPG)** in 2018.
- The Countryside and Wildlife Team (C&WT) has undertaken a **variety of surveys** such as Sites of Importance for Nature Conservation (**SINC**) surveys; the **Colliery Spoil Biodiversity Initiative** and the **Blue Ground Beetle Project**.

² WG (2019) Environment (Wales) Act 2016 Part 1 – Guidance for Section 6 – The Biodiversity and Resilience of Ecosystems: Reporting Guidance <https://www.biodiversitywales.org.uk/File/701/en-GB>

- **Projects** – the C&WT is successfully leading on a number of biodiversity focused grant funded projects, which has led to many positive outcomes for health and wellbeing and other wider benefits, including multi-agency projects at a regional and landscape scale including:
 - **Lost Peatlands Project;**
 - **Working with Nature Project;**
 - **Connecting Green Infrastructure – South West Wales;**
 - Management of **Dyffryn Wildlife Site** and **Craig Gwladus Country Park;** and
 - **Local Nature Partnership (LNP) Cymru Project.**

Notable Barriers – whilst there have been numerous positive achievements over the reporting period there still remains a number of barriers to implementation of the Duty, including:

- The C&WT is heavily supported by income generation schemes and external grant funding, and consequently **many posts are temporary;**
- **Loss of regular and long term external funding** has led to uncertainty for staff and reduced capacity to deliver action for biodiversity; and
- Whilst significant progress has been made **integrating biodiversity into decision making**, there still remains challenges, particularly as a result of budget pressures, meeting grant funding deadlines or wider corporate or national requirements.

New (Future) Actions – in addition to minor amendments to existing actions to bring them in line with updated work practices, changes in funding or national action, two new actions have been recommended for inclusion within the new Plan, namely:

- **1.8 New Council Strategies** – C&WT to aid in the development of strategies or plans that contribute towards biodiversity conservation and respond to consultations and reviews of existing plans; and
- **3.5 Green Infrastructure Assessment (GIA)** – the Council will undertake a GIA in line with the requirements of Planning Policy Wales (PPW).

Conclusion – the 2017 Plan has allowed the Council to further embed biodiversity into decision making outside of the traditional service areas and whilst some actions have taken longer to fulfil than expected, progress

has been made on all actions and will continue through the implementation of the new Plan (scheduled for publication by the end of 2020).

Publication Procedures and Next Steps

Once approved, the BDP 2017 Implementation Report will be published on the Council's website and the link submitted to the WG. Additionally, in accordance with the Council's Welsh Language Standards Policy, the document will also be made available in Welsh.

Hard copies of the Plan will be made available for purchase at a reasonable charge. In common with previous practice, it is suggested that the price be based on the cost of printing together with postage and packing at the prevailing cost. Electronic copies will be made available at no cost.

Work will then commence on producing a **revised Biodiversity Duty Plan** by the end of the year, incorporating amendments and recommendations from the Implementation Report. Covering the period 2020-2023, the new BDP will focus on evaluating the Council's existing work practices and assimilate the new statutory duty into wider Council functions. This will result in a more joined-up approach between services, fulfilling both the Environment (Wales) Act requirements and the sustainability ethos embedded in the Well-Being of Future Generations (Wales) Act.

Financial Impacts

Given that there was no additional funding made available for the implementation of this Duty, delivery against the Plan was achieved within existing budgets, with a focus on making changes to work practices that could be achieved without placing a financial burden on the Council.

Project delivery and improvement works requiring additional resources were delivered through the use of external grants or partnership working. New, and amendments to existing actions have taken a similar approach, to ensure that delivery of the Plan can be achieved with existing resources.

Integrated Impact Assessment

A first stage impact assessment has been undertaken to assist the Council in discharging its legislative duties (under the Equality Act 2010, the Welsh Language Standards (No.1) Regulations 2015, the Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016.

The first stage assessment (presented in **Appendix 2**) has indicated that a more in-depth assessment is not required. A summary is included below.

- **Equalities** – biodiversity affects all generations and all areas of society. Implementation of the actions will be inclusive and will involve the Countryside and Wildlife Team working with all staff / sections throughout the Council, the wider public and a wide range of partner organisations including those from the public, private and community / voluntary sectors.
- **Welsh Language** – all of the actions contained within the 2017 BDP adhere to the Welsh Language Standards (No. 1) Regulations 2015 and any amendments to actions or new proposed actions recommended by the Implementation Report will also adhere to these Regulations. All communication via the Authority's social media platforms and websites; radio broadcasts and reports etc. are translated into Welsh and the technical names of species and habitats are also translated which increases people's opportunity to use and expand upon their Welsh Language vocabulary.
- **Biodiversity** – this is the remit of the 2017 BDP and Implementation Report. Actions contained within the BDP are monitored, with recommendations, through the Implementation Report, ensuring that the Council meets its statutory duty to maintain and enhance biodiversity as set out within the Environment (Wales) 2016 Act. One of the actions incorporated within the 2017 BDP was to include the impact on biodiversity into the Council's Integrated Impact Assessment (IIA). Additionally, numerous projects and initiatives organised by the C&WT and partners contribute towards meeting the Authority's statutory duty to promote the resilience of ecosystems, supporting protection of the wider environment.
- **Well-being of Future Generation (5 Ways of Working)** – the BDP 2017 Implementation Report embraces all five ways of working. The Implementation Report provides progress achieved on the 2017 BDP actions and recommendations for future improvement in order to meet the Council's Biodiversity Duty. The BDP and accompanying Implementation Report positively integrates with the Council's well-being objectives; involves people and partners in its development and implementation; and seeks to prevent problems getting worse.

Valleys Communities Impacts

No implications.

Workforce Impacts

No implications.

Legal Impacts

No implications.

Risk Management Impacts

The Council will be in breach of its statutory duties to prepare, publish and report on the Biodiversity Duty Plan (BDP) should there be a failure to implement the proposed recommendations.

Consultation

There is no requirement for external consultation on this item.

The BDP Implementation Report is the outcome of implementing the actions in the 2017 BDP. No substantial changes have been made since the original internal consultation, therefore, no further consultation has been undertaken.

Recommendations

That having considered the report, it is resolved to make the following recommendations for approval:

1. That the Biodiversity Duty Plan (BDP) 2017 Implementation Report as set out within Appendix 1 be agreed.
2. That the publication procedures as set out in the report are implemented.
3. That the report and recommendations be commended to Council for approval.

Reasons for Proposed Decisions

The recommendations are needed to ensure compliance with the requirements of the Environment (Wales) Act 2016.

Implementation of Decision

The decision is proposed for implementation after the three day call in period.

Appendices

Appendix 1 – NPT Biodiversity Duty Plan (BDP) (2017) Implementation Report

Appendix 2 – First Stage Assessment: Integrated Impact Assessment (IIA)

List of Legislation and Guidance Documents

Environment (Wales) Act 2016

Well-being of Future Generations (Wales) Act 2015

Nature Recovery Action Plan for Wales (2015)

Welsh Government (WG) (2019) Environment (Wales) Act 2016 Part 1 – Guidance for Section 6 – The Biodiversity and Resilience of Ecosystems: Reporting Guidance

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APPENDIX 1

NPT Biodiversity Duty Plan (BDP) 2017 Implementation Report



Cyngor Castell-nedd Port Talbot
Neath Port Talbot Council

Neath Port Talbot Council Biodiversity Duty Plan (2017) Implementation Report

October 2020



www.npt.gov.uk

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1. Introduction

1 Introduction

1.1 Legislative requirements

- 1.1.1 The Environment (Wales) Act 2016 (the Act) introduced an enhanced biodiversity and resilience of ecosystems duty (the section 6 or S6 duty) for public authorities (including the Council), which must seek to maintain and enhance biodiversity in the exercise of their functions, so far as is consistent with the proper exercise of those functions, and in so doing promote the resilience of ecosystems.
- 1.1.2 To comply with the S6 duty the Council should embed the consideration of biodiversity and ecosystems into their early thinking and business planning, including any policies, plans, programmes and projects, as well as their day to day activities.

1.2 Neath Port Talbot (NPT) Biodiversity Duty Plan (2017) Implementation Report

- 1.2.1 The Neath Port Talbot Biodiversity Duty Plan (the Plan) was adopted in December 2017 and sets out how the Council intends to comply with the duty. It outlines what natural resources NPT has, why they are special and some of the activities already underway to protect them. It explains the legislative background; the mechanisms for delivery; detailed actions to be achieved and milestones for reporting.

Figure 1 – Neath Port Talbot Biodiversity Duty Plan (2017)



Neath Port Talbot County Borough Council
Environment (Wales) Act 2016—Biodiversity Duty Plan
December 2017

1. Introduction

1.3 Programme for Reporting

- 1.3.1 Under section 6 (7) of the Act, the Council must, before the end of 2019 and before the end of every third year thereafter, publish a report on what they have done to comply with the S6 duty.
- 1.3.2 In order for the Council to monitor the actions within the Plan in line with grant funding streams and to allow for political reporting it is proposed that the monitoring timeline aligns with financial years.
- 1.3.3 This implementation report is dated October 2020 as this is the date at which it gained Cabinet approval, however, the report monitors the actions from initial publication up to financial year end 2020 – i.e. December 2017 to 31st March 2020. Due to the late release of the Welsh Government (WG) guidance (November 2019) it has not been possible to publish the Council's Implementation Report by the end of 2019.
- 1.3.4 Accordingly, the Council will monitor the actions of the next BDP (2020), from 1st April 2020 to 31st March 2023, and submit the Implementation Report to WG by October 2023 and place it on the Council's website.
- 1.3.5 The S6 duty guidance states that the Council can amend the Plan at any time. If such circumstances arise, this report will appear as an appendix to the new plan and will identify the reasons for the changes. Any changes made during that time will be documented within the 3 year implementation report and submitted to WG.



Viper's-bugloss outside The Quays Council Office, Baglan Energy Park. The site qualifies as a SINC and is managed to retain its interesting flora

2 Background

2.1 Context – Neath Port Talbot Council

- 2.1.1 The County Borough of Neath Port Talbot (NPT) is located on the coast between the counties of Swansea and Bridgend. NPT also shares boundaries with Carmarthenshire, Powys, Rhondda Cynon Taf (RCT) and the Brecon Beacons National Park. The population is over 140,000 and the administrative area covers 44,217 hectares.
- 2.1.2 NPT has a wide variety of habitats and species, from marshy grassland in the valleys supporting marsh fritillary butterfly to ancient woodlands providing home to the rare honey buzzard and blue ground beetle; and lowland wetlands and canals attracting fen raft spiders. Whilst the coastal dunes and saltmarsh border Swansea Bay, NPT's upland peatbogs extend right across the plateau into RCT with brownfield land such as coal tips supporting rare plants and invertebrates.



Aberpergwm restored bog site

- 2.1.3 As a Local Authority, Neath Port Talbot Council has the ability and opportunity to influence the amount and extent of biodiversity within the County Borough through management of its land / assets, strategies, policies and project delivery. The Authority implements and enforces national policy and legislation, works in partnership with a wide variety of stakeholders and engages with the public to achieve wider benefits.

2. Background

- 2.1.4 Delivery of the S6 Duty and implementation of the Plan is the responsibility of the Council as a whole. Following adoption of The Plan in December 2017, the Council embedded the coordination and monitoring into a staff post, putting the Biodiversity Implementation Officer of the Countryside and Wildlife Team as lead officer for the Plan.



NPT is a stronghold for the UK's smallest butterfly - the small blue

3. Highlights, Key Outcomes and Issues

3 Highlights, Key Outcomes and Issues

This section sets out the positive outcomes that have been achieved to-date from the progress made on the Actions set out within the Report (Section 4). It also highlights key enablers and barriers that have or are continuing to prevent action.

3.1 Key Biodiversity Actions

Governance / Corporate Processes

- 3.1.1 **Corporate Plans and Processes:** An action to deliver against the Biodiversity Duty has been built into the Corporate Plan. Green Infrastructure, of which biodiversity is a key element, has been identified as a cross-cutting theme across all objectives within the Public Service Board's Well-being Plan.
- 3.1.2 **Integrated Impact Assessment (IIA).** The Council's IIA considers the duties and requirements of the key legislation in order to inform and ensure effective decision making and compliance, addressing equalities, welsh language, well-being and biodiversity. A summary of the IIA is contained within a section of all Cabinet Reports taken through the Council's political process with the full IIA attached (as appropriate) as an appendix to the Report. This procedure has raised the Team's profile of its statutory responsibilities, throughout the Authority.
- 3.1.3 **Countryside and Wildlife Team (C&WT) early engagement and biodiversity advice:** There is a well-established relationship between the C&W Team and planning services, with the team actively engaged in both the Development Management Process and Local Development Plan. There is improved collaborative working with wider departments, which has been supported by the employment of a Graduate Ecologist to provide survey and in-house consultancy services, resulting in early engagement in projects and cost savings.

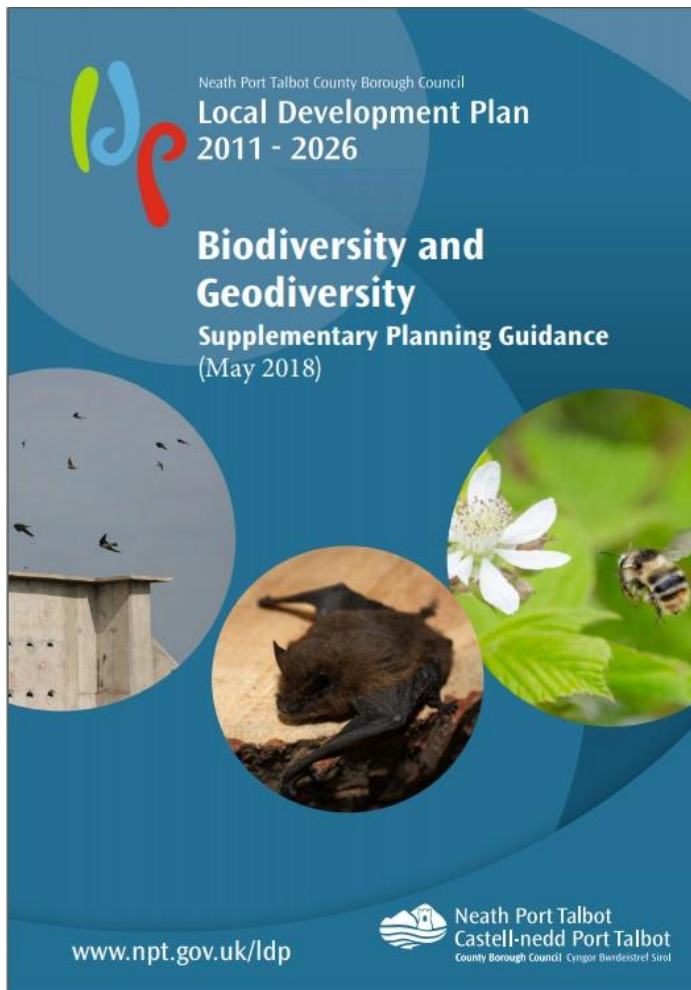


Early engagement on projects saves time and money

3. Highlights, Key Outcomes and Issues

- 3.1.4 **Biodiversity Supplementary Planning Guidance (SPG)** – the Authority adopted the Biodiversity and Geodiversity SPG in 2018. The SPG sets out the basic framework for dealing with Biodiversity in the planning process in Neath Port Talbot. It provides guidance on how to conserve and enhance important habitats and species as part of development.

Figure 2 – Neath Port Talbot’s Biodiversity & Geodiversity SPG (2018)



https://www.npt.gov.uk/media/9003/spg_biodiversity_geodiversity_may18.pdf

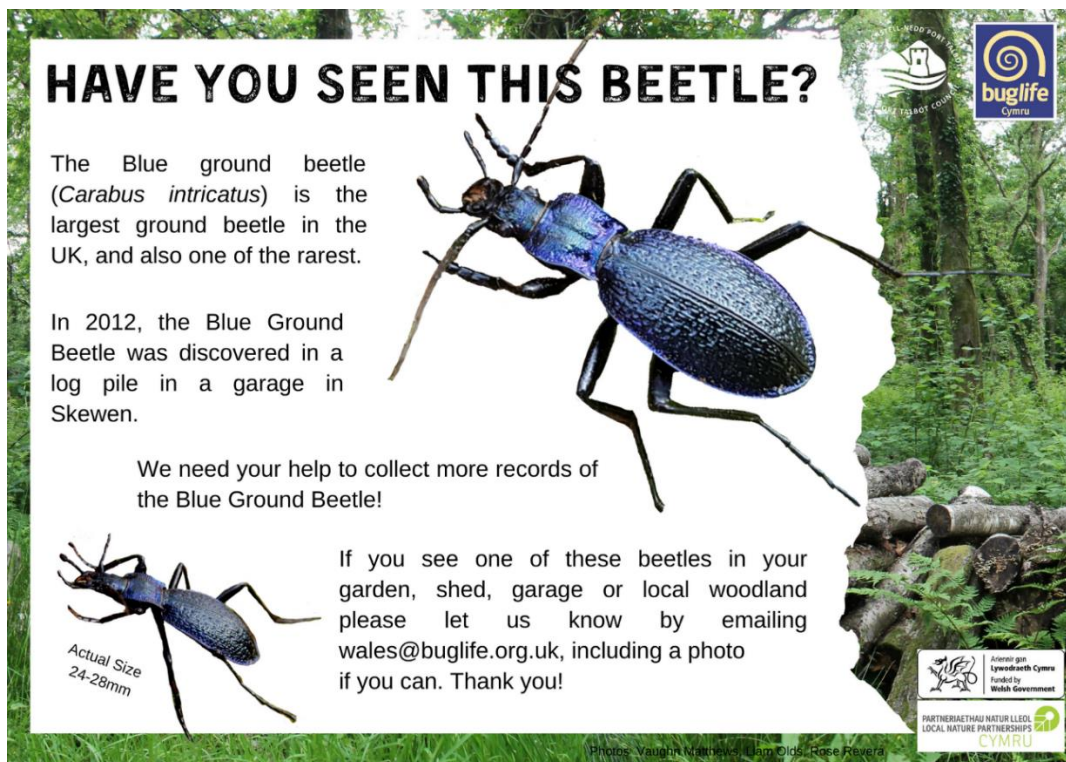
Surveying and Data

- 3.1.5 **Sites of Importance for Nature Conservation (SINC) surveys** – The C&WT undertake a standard 10% of SINC surveys annually which provides up to date information to feed into the Authority’s decision making processes.
- 3.1.6 **Data collection** – the Authority has in-house expertise and software which can collect, collate, interrogate and display a variety of data. Using specialist software the Authority is able to generate and share biological records. The use of QGIS mapping software enables the Authority to analyse a variety of data in map form, displaying data in a way that people can easily relate to. Recently this was used to map priority areas for Green Infrastructure interventions and to liaise with the

3. Highlights, Key Outcomes and Issues

public on how these should be delivered.

- 3.1.7 The **Colliery Spoil Biodiversity Initiative** surveyed several coal spoil sites throughout NPT and RCT; positively identifying 901 invertebrate species. Of these, 195 (~22%) are deemed to be of conservation priority (i.e. species considered Nationally/ Locally Scarce or Rare in Britain and/ or listed under Section 7 of the Environment (Wales) Act 2016 as species of principal importance in Wales). The work highlighted the importance of the habitat (coal spoil) in reproducing the conditions found in coastal habitats, allowing species displaced from the coast to disperse into other areas.
- 3.1.8 The charity **Buglife** ran a **Blue ground beetle project in 2019**. The Skewen area is the only place this beetle is found in Wales. Supported by the Council and the Local Nature Partnership, the Project engaged local people in the search for the beetle and in practical habitat management projects. Surveys by volunteers and professionals revealed the local conditions the beetle requires and generated many records. Identification postcards have been produced to encourage and report any further sightings.



Blue ground beetle survey card

Projects

- 3.1.9 The Council is successfully leading on a number of biodiversity focused grant funded projects, including multi-agency projects at a regional and landscape scale. These include:
- **The Lost Peatlands Project**, funded by the Heritage Fund. With over £400K already secured for the development there is the potential for a further £1.8M as part of the delivery phase. The project works in partnership with several organisations including NRW, Rhondda Cynon Taf (RCT), Swansea

3. Highlights, Key Outcomes and Issues

University, Coed Lleol (Small Woods Association) and Active Building Centre. It will restore peatland to help combat climate change and enhance biodiversity. Community engagement events will reconnect people with the wildlife, landscape and heritage of the area.

- **The Working with Nature Project**, which has supported volunteers and local communities in bringing sites into active management for biodiversity, including Local Nature Reserves, Parks and SINCs (Sites of Importance for Nature Conservation). Funded through LEADER and WG Single Revenue Grant.
- **Connecting Green Infrastructure – South West Wales** (Welsh Government Enabling Natural Resources and Well-being (EnRAW). This regional project took forward a new and collaborative approach to designing and implementing green infrastructure (GI) and nature recovery across Neath Port Talbot (NPT), Swansea and Carmarthenshire, for the benefit of local communities and their natural environment. £425K was secured for 2019/20, with a further application for £2.6M progressed to full application through the RDP ENRaW funding stream.
- Additional funding has also been secured from the Heritage Lottery Fund and Natural Resources Wales for distinct sites; **Dyffryn Railway Wildlife Site and Craig Gwladus Country Park**, with a particular focus at Craig Gwladus Country Park on developing a long term funding and income generation strategy for ongoing management of the site.
- The Council is a collaborative partner in the **Local Nature Partnership (LNP) Cymru Project**, with Welsh Council for Voluntary Action (WCVA) as project lead, and again funded through the ENRaW funding stream. The funding has enabled the employment of a dedicated LNP Officer, providing a supporting role for NPT's Nature Partnership in development of the LNP Plan and delivery of biodiversity action.



NPT Local Nature Partnership site visit

3. Highlights, Key Outcomes and Issues

3.2 Positive Outcomes for Health and Wellbeing

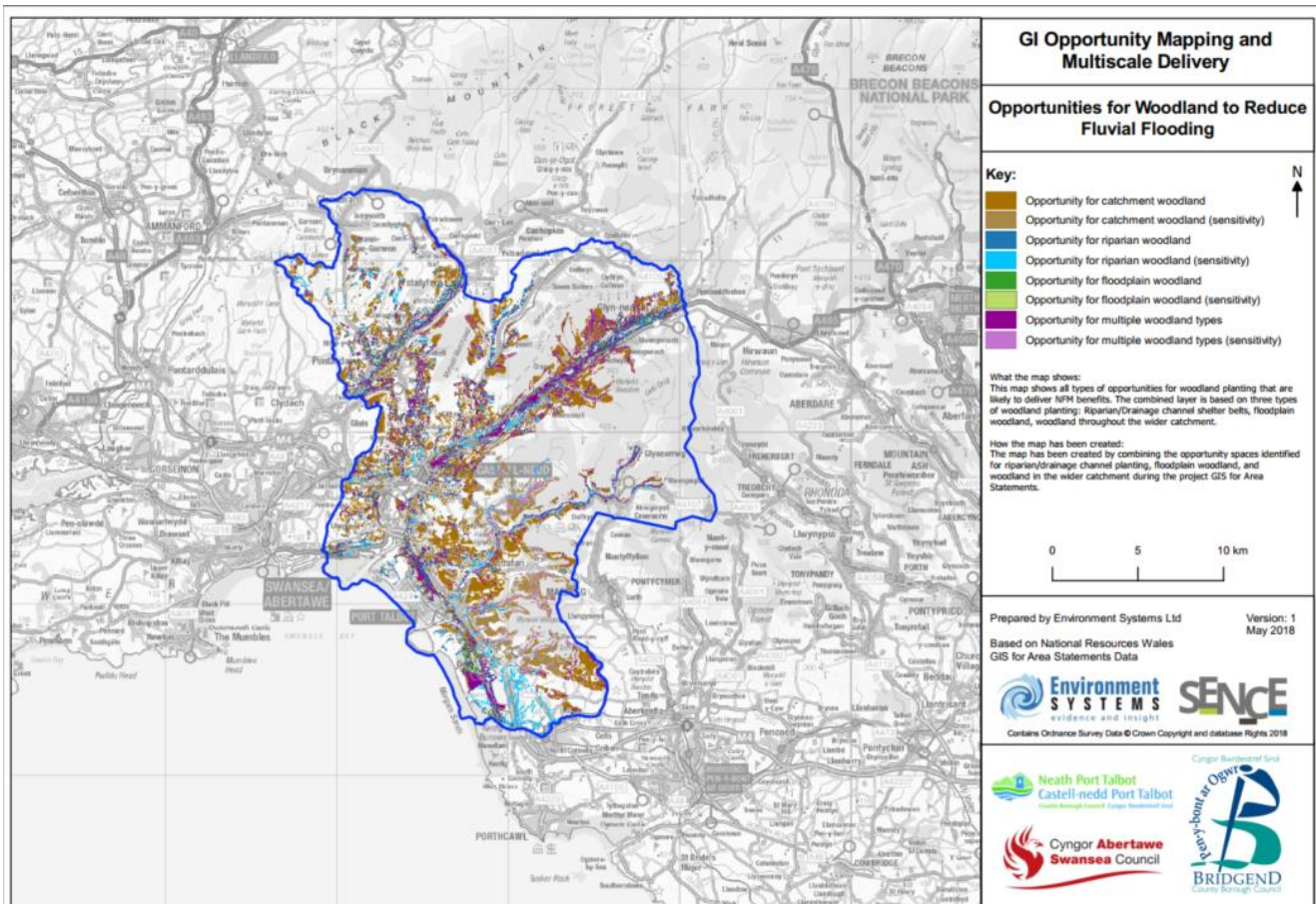
- 3.2.1 Engagement in the natural environment is now a strong element across all biodiversity projects being delivered by the C&W Team, either by participation in conservation activities, or through more focused well-being activities, designed to encourage new users to a site and / or increase confidence in engaging in these kinds of activities.
- 3.2.2 **Working with Nature** has, in particular, focused on well-being as a key outcome, engaging with a range of people of differing abilities and interests across the County Borough. The project has engaged with over 700 participants in the natural environment through the delivery of over 300 conservation and well-being activities since the project started. Participants have reported improved mental and physical well-being through increased physical activity, social engagement and interaction with nature. Partnership working with Coed Lleol (Small Woods Wales) has provided more targeted health and well-being activities, to increase opportunities for engagement and to benefit from access to the natural environment.



Wild cooking at Cwm Du Glen and Glanrhyd Plantation LNR, Pontardawe

- 3.2.3 A **Regional Green Infrastructure (GI) project** covered NPT, Bridgend and Swansea areas. Maps were produced that identified areas suitable for GI for various ecosystem services. One main driver of the project was to enhance access to open space to improve health and wellbeing. The data and maps will be used to feed into the production of the Neath Port Talbot Green Infrastructure Assessment (GIA) and steer future work on the ground.

3. Highlights, Key Outcomes and Issues



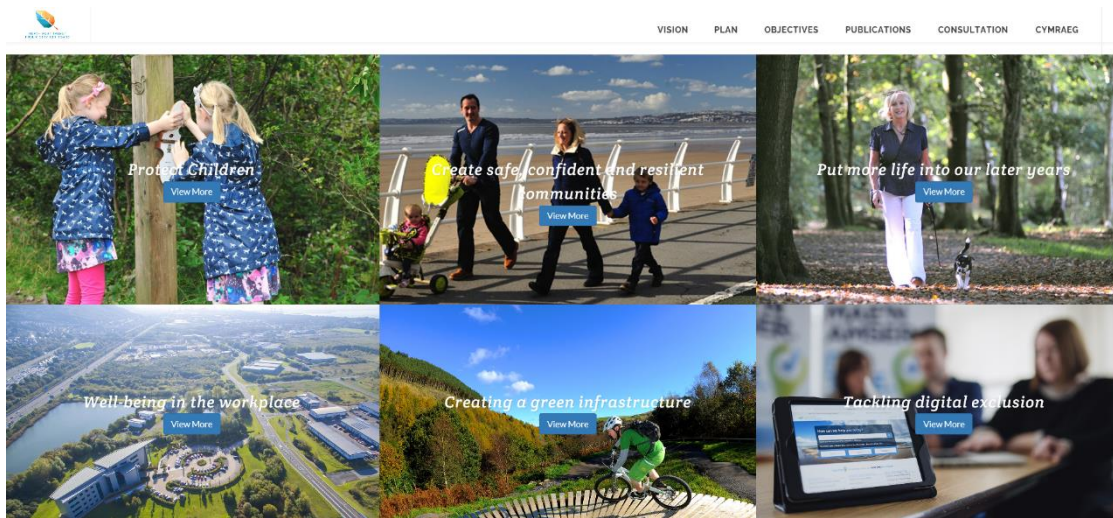
Example of a map produced for the GI project

3.3 Key Enablers

- 3.3.1 The Council’s long established C&WT provide services and advice throughout the authority. The responsibility for this Plan was embedded into a permanent post, the Biodiversity Implementation Officer, whilst the scope and capacity of the team has been enhanced by the creation of a new consultancy service and employment of a graduate ecologist to support this service. This has allowed closer working with other service areas and wider awareness of the Council’s statutory duties.
- 3.3.2 There is good support for the C&WT at a corporate level, in delivering the requirements of the Plan, and in taking forward wider projects and initiatives. This has enabled a prominent role in regional and multi-agency projects, adding significant value to existing Council resources, whilst also supporting improved collaborative working with other departments.
- 3.3.3 Having a named Member as Biodiversity Champion has raised the profile of the biodiversity of NPT. It has also enabled a closer working relationship with Members.
- 3.3.4 The Well-being and Future Generations Act has supported an enhanced profile for biodiversity at a corporate and multi-agency level, also leading to increased opportunities for more cross-sector partnership working. The inclusion of Green

3. Highlights, Key Outcomes and Issues

Infrastructure as a cross-cutting theme in the Public Service Board's Well-being Plan was a notable achievement.



NPT Public Service Board Objectives

3.4 Notable Barriers

- 3.4.1 Biodiversity has consistently been under-resourced over the years and this is equally the case in Neath Port Talbot. Whilst the Council has succeeded in putting in place a good size team to deliver on biodiversity, this is heavily supported by income generation schemes and external grant funding, and consequently many posts are temporary. NPT Council made a commitment to secure a permanent post in order to deliver this Plan, however, this has inevitably put pressure on the team in delivering its wider functions. The provision of core funding to Public Bodies to appropriately resource the delivery of the Biodiversity Duty would have been welcomed, and going forward would provide greater opportunity to deliver against the Act.
- 3.4.2 The loss of regular and long term funding (i.e. the loss of the NRW Funding Partnership stream) and subsequently the Single Revenue Grant, has led to uncertainty for staff members and reduced capacity to deliver for biodiversity. Whilst the team has been successful in drawing down funding, these are often short term and related to specific project delivery. Whilst schemes such as ENRaW are extremely valuable for delivery of larger projects, there remains a gap in core funding, which reduces ability for long term planning and delivery. This is equally relevant for loss of core funding for voluntary organisations, the impact of which has already been seen in NPT by the loss of core funding for PONT, and subsequently the loss of the Glamorgan Grazing Scheme.
- 3.4.3 Whilst significant progress has been made in integrating biodiversity into decision making, there remains challenges in accommodating biodiversity requirements to the fullest extent possible. Some departments can be constrained by financial pressures, their own grant requirements and other statutory duties, and there remains a need to further integrate biodiversity requirements at a corporate level, and into governance and funding mechanisms fed down from Welsh Government.

4. Action Report

4 Action Report

4.1 Nature Recovery Action Plan (NRAP) Objectives

- 4.1.1 This section reports on actions in the S6 duty plan, which were based on the objectives in the Nature Recovery Action Plan (NRAP) for Wales. The NRAP outlines how Wales will meet the commitments of the Convention on Biological Diversity, which is the key international agreement on biodiversity to which the UK Government is the signatory.
- 4.1.2 Progress against the milestones in the Plan are given with recommendations on future action. Amendments are explained and proposed new actions are suggested.
- 4.1.3 Identification of new milestones for years 3 to 5 will be undertaken for the new 2020 Plan. Where relevant in relation to amended actions, some of these milestones are included within this implementation report.

Figure 2 – Nature Recovery Action Plan (NRAP) Objectives

NRAP Objectives	
1	Engage and support participation and understanding to embed biodiversity throughout decision making at all levels
2	Safeguard species and habitats of principal importance and improve their management
3	Increase the resilience of our natural environment by restoring degraded habitats and habitat creation
4	Tackle key pressures on species and habitats
5	Improve our evidence, understanding and monitoring
6	Put in place a framework of governance and support for delivery

- 4.1.4 Some actions deliver against a range of objectives, however to avoid duplication, the actions are organised into the most appropriate NRAP objective with any additional relevant objectives (that they contribute to) highlighted in the coloured table below each action.
- 4.1.5 When producing the Plan, any actions that were already being carried out by the Council were highlighted in **Blue** and those that would be instigated through the Plan were highlighted in **Green**. Those that have started will revert to blue in the new Plan and actions recommended for deletion are highlighted in **Red**.

NB. C&WT = Countryside and Wildlife Team; Year 1 = December 2017 – March 2019 and Year 2 = April 2019 – March 2020.

4. Action Report

NRAP Objective 1: Engage and support participation and understanding to embed biodiversity throughout decision making at all levels

1.1	BIODIVERSITY ADVISORY SERVICE
Action	NPTC currently consider biodiversity in a wide range of functions, specifically through implementing the policies of the Local Development Plan (LDP) when making decisions through the development management process.
Reporting mechanism	C&WT planning spreadsheet which lists all planning applications that have received a Biodiversity response. The spreadsheet lists net loss / gain of habitat and recommendations to improve the scheme i.e. bat boxes. This information is also plotted on GIS.
Milestone year 1	Meet with the development management team to ensure the Biodiversity recommendations are in an appropriate format and update on the latest legislation/policy/regulations.
Progress	Internal response templates changed to reflect changes in legislation/policy/regulations.
Milestone year 2	Continue to liaise with the development management team to ensure the biodiversity recommendations (including the standardised biodiversity conditions) are included within the DM officer's reports in an appropriate format and provide an update to the DM Team on the latest legislation/policy/regulations.
Progress	Currently working with the development management team to standardise the wording of some planning conditions.
Recommendation	<p>Amend Action 1.1 to make reference to providing biodiversity advice to the SAB (SuDs Approving Body) team</p> <p>Action - the Council currently consider biodiversity in a wide range of functions, specifically through implementing the policies of the LDP when making decisions through the development management process and as part of the SuDs (Sustainable Urban Drainage Systems) Approving Body.</p> <p>Milestones - All advice recorded in the spreadsheet followed.</p>

NRAP Objectives	1					6
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1.2	NATURAL RESOURCES MANAGEMENT WORKING GROUP
Action	The NPT Natural Resources Management working group has been set up to consider opportunities to deliver sustainable natural resource management through the functions of the Environment Directorate.
Reporting mechanism	Attendance at regular meetings.
Milestone year 1	In line with the requirements of the group – awareness raising and sharing of good practice.

4. Action Report

Progress	Initial meetings were held, providing the opportunity for increased understanding of wider departmental remits and work practices.
Milestone year 2	N/A
Progress	N/A
Recommendation	Remove this action. The NPT Green Infrastructure Core Group has since been established, to lead on delivery of the Public Service Board's (PSB) Green Infrastructure (GI) theme. Resources have been reprioritised to this group, due to the opportunity for wider partnership working.

NRAP Objectives	1		3	4		6
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1.3	SERVICE ASSESSMENT
Action	All services to be risk assessed to determine their potential impact on biodiversity and opportunities for best practice. Training provided as appropriate.
Reporting mechanism	Standard reports by the C&WT for each service.
Milestone year 1	Programme of assessment to be drawn up by C&WT - Assessments have started.
Progress	6 assessments carried out so far.
Milestone year 2	Assessments progressing and actions resulting from the recommendations included within the next Plan.
Progress	Work needed to identify roles and hierarchy of departments was greater than anticipated, therefore initial assessments will take longer than originally anticipated. Actions to be proposed once service assessment complete.
Recommendation	Retain action.

NRAP Objectives	1					
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1.4	C&WT EARLY ENGAGEMENT
Action	The C&WT will identify service areas and set up regular meetings as appropriate, to discuss work plans and identify early issues/opportunities for biodiversity/ecosystem enhancements.
Reporting mechanism	Attendance at regular meetings.
Milestone year 1	Programme of meetings to be agreed. Meetings started.
Progress	Meetings held on an ad hoc basis since the Graduate Ecologist has been in post, as projects come up. This has allowed for early engagement and the flexibility for continual involvement and reaction to issues. The need for regular meetings will be kept under review and revisited if current programme of meeting is considered to be inadequate.
Milestone year 2	Meetings continuing.

4. Action Report

Progress	More departments have contacted the C&WT for advice, which is being provided.
Recommendation	<p>Amend action and reporting mechanism as set out below:</p> <p>Action - The C&WT are regularly consulted by other service areas and give appropriate advice and services.</p> <p>Reporting Mechanism – Spreadsheet /PASTA.</p> <p>Milestones - Retain internal consultancy function and continue to provide early advice to service areas throughout the Authority. All advice followed.</p>
NRAP Objectives	

1.5	DECISION MAKING PROCESS
Action	Biodiversity will be integrated into the impact assessment toolkit (Integrated Impact Assessment (IIA)) being developed as part of the Council's decision making process.
Reporting mechanism	Standard section in Committee reports.
Milestone year1	Proposals put forward for inclusion in the toolkit.
Progress	Inclusion in toolkit.
Milestone year 2	All committee reports to contain a report on outcomes of the impact assessment.
Progress	Specific biodiversity impact question in the Integrated Impact Assessment (IIA).
Recommendation	<p>Amend action as set out below:</p> <p>Action - The Integrated Impact Assessment (IIA) that accompanies all committee reports includes an assessment of the impact on biodiversity in line with the Environment (Wales) Act 2016.</p>
NRAP Objectives	

1.6	TRAINING
Action	Integrate biodiversity into any Elected Member or officer training being delivered as part of the Well-being and Future Generations Act, 2015.
Reporting mechanism	Training in line with well-being objectives.
Milestone year1	Agreement made to include biodiversity in training material being developed.
Progress	Training has been provided as part of the Integrated Impact Assessment (IIA) process to officers and members, of which

4. Action Report

	biodiversity is a key element. No further training has been carried out as part of the Well-being and Future Generations Act.
Milestone year 2	Biodiversity integrated into the training programme.
Progress	Training has been provided as part of the Integrated Impact Assessment (IIA) process to officers and members, of which biodiversity is a key element. No further training has been carried out as part of the Well-being and future Generations Act.
Recommendation	Amend action as set out below: Opportunities are taken to integrate biodiversity into any Elected Member or officer training (where appropriate) being delivered to raise awareness of S6 Duty / Biodiversity.
NRAP Objectives	1 6

1.7	BIODIVERSITY SPG
Action	Prepare, adopt and implement the Biodiversity Supplementary Planning Guidance in line with LDP policies.
Reporting mechanism	SPG written.
Milestone year 1	SPG draft June 2017.
Progress	Published.
Milestone year 2	Implement SPG.
Progress	SPG being used to assess planning applications.
Recommendation	Amend the Action and Reporting mechanism as set out below: Action - Implement the Biodiversity Supplementary Planning Guidance in line with LDP policies. Reporting Mechanism – C&WT Planning spreadsheet. Milestones - Implement SPG.
NRAP Objectives	1 2 3 4 5 6

1.8	WELL-BEING PROCESS
Action	A healthy, functioning ecosystem is a vital component of our well-being, and the principles of the Biodiversity Plan will need to be integrated into the requirements of the Well-being of Future Generations (Wales) Act, 2015. Ensure that actions taken to deliver the Biodiversity Duty are part of the Council's Well-being objectives.
Reporting mechanism	Via well-being objectives.
Milestone year 1	TBC from Well-being objectives.

4. Action Report

Progress	An overarching action to deliver the Biodiversity Duty Plan has been integrated into Well-being Objective 3 - to develop the local economy and environment so that the well-being of people can be improved. Ref. 3.5.1: All services work together to deliver the Biodiversity Duty Plan and Green Infrastructure across the County Borough. In addition, a Key Performance Indicator is built into the Corporate Plan for management of council owned land.
Milestone year 2	Further detail on delivery against the Biodiversity Duty Plan achieved through monitoring of performance indicators, reporting on a quarterly basis.
Progress	Delivery against performance indicators reported at Committee quarterly, with delivery against the Biodiversity Duty included in the annual update on the Corporate Plan. Furthermore, the Council is a key partner in the Public Service Board, which is responsible for delivery of the NPT Well-being Plan. Biodiversity is seen as an integral part of green infrastructure, which in turn is recognised as a cross-cutting theme across each of the well-being objectives.
Recommendation	<p>Amend text of action and reporting mechanism as set out below:</p> <p>Action - Deliver against 'Shaping NPT, the Council Corporate Plan's Improvement Priority 3.5; protect, conserve and enhance our natural environment and increasing awareness of its value and encouraging wider participation. Support delivery of the Green Infrastructure Cross Cutting Objective of the Public Service Board's Well-being Plan.</p> <p>Reporting Mechanism - Via the Corporate Plan and PSB annual reports.</p>

NRAP Objectives	1	2	3	4	5	6
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Proposed new action

1.8	NEW COUNCIL STRATEGIES
Action	C&WT to collaborate where appropriate with other sections to aid in the development of strategies or plans that contribute towards biodiversity conservation and respond to consultations and reviews of existing plans.
Reporting mechanism	BDP Reporting Spreadsheet (presented within the next report).
Milestone year 3	N/A
Milestone year 4	N/A
Milestone year 5	N/A
Recommendation	Adopt this action as part of the new Plan.

NRAP Objectives	1	2	3	4	5	6
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4. Action Report

NRAP Objective 2: Safeguard species and habitats of principal importance and improve their management

2.1	RE-VISIT CURRENT SCHEMES
Action	Through a series of previous projects, including Conservation Areas and Verges, other service areas are aware of the importance of biodiversity. C&WT are reviewing these projects to assess their effectiveness, and if relevant, will seek amendments to existing schemes.
Reporting mechanism	Review report.
Milestone year 1	The review will be complete.
Progress	All known sites brought into one GIS layer.
Milestone year 2	Infrastructure across the County Borough.
Progress	Implementation of management requirements across infrastructure and sites continued. Early discussions have been held on a further review of the scheme to include all verges.
Recommendation	<p>Amend Action to: Nature Conservation Sites Scheme. Undertake a review of the Nature Conservation Sites' scheme to include management of all verges and of council owned sites.</p> <p>Milestone year 3 – A working group is underway to develop the new scheme Milestone year 4 and 5 – implement the new scheme.</p>
NRAP Objectives	

2.2	DEVELOPMENT MANAGEMENT PROCESS
Action	NPTC currently consider biodiversity (including species and habitats of principal importance, designated sites, sites of importance for nature conservation (SINC), habitats and species that meet the SINC criteria, and important natural features) through the development management process, in line with the Local Development Plan. Losses of protected/priority habitat/species (where known) are recorded.
Reporting mechanism	C&WT planning spreadsheet.
Milestone year 1	No net loss and, where possible, net gain of S7 and SINC habitats/species through the planning process. No net loss of habitat / species that are designating features of a site.
Progress	There was no net loss.
Milestone year 2	No net loss and, where possible, net gain of S7 and SINC habitats/species through the planning process. No net loss of habitat / species that are designating features of a site.
Progress	Net loss of 0.15ha of SINC habitat (open mosaic on previously developed land).
Recommendation	Retain.

4. Action Report

NRAP Objectives	1	2	3	4	5	6
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2.3	WG ESD LA GRANT
Action	NPTCBC draw down funding from the WG Environment and Sustainable Development (ESD) Grant. This is partly allocated to the C&WT who utilise it to administer biodiversity enhancement and engagement projects.
Reporting mechanism	As grant requirements.
Milestone year 1	As grant requirements.
Progress	A range of projects and initiatives were delivered as part of the grant, including community support, habitat management and species surveys, delivery of outdoor focussed health and well-being programmes and volunteer training, partnership support and landowner support for woodland creation and management.
Milestone year 2	As grant requirements.
Progress	The ESD grant has been discontinued by Welsh Government and replaced by the competitive Enabling Natural Resources and Well-being Grant (EnRAW). The Council were initially awarded funding for one year and have now resubmitted for a three year project to run from 1 st April, 2020. An expression of interest was successful and the outcome of the full application is pending.
Recommendation	Remove this Action.

NRAP Objectives	1	2	3			
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2.4	WORKING WITH NATURE
Action	The grant funded Working with Nature Project undertakes conservation and community engagement activities at publicly accessible sites, focusing on the multiple benefits to be had from the natural environment.
Reporting mechanism	As grant funded requirements, including RDP LEADER and WG ESD LA Grant.
Milestone year 1	As grant requirements.
Progress	The Working with Nature Project started in August 2016. The project has delivered environmental and access improvements to a number of sites, through the help of volunteers and community groups. The project has engaged with 616 people by March, 2019, 230 of which were during the 18/19 financial year. A combined total of 156 activities were completed, including a range of educational, volunteer and engagement events, working across 17 sites across the County Borough.
Milestone year 2	As grant requirements.
Progress	The project has continued, with additional funding support secured as part of the WG Enabling Natural Resources and Well-being Grant. A further 164 activities have been carried out, bringing the total to 320 across the project duration, with 791

4. Action Report

	people engaged from project start. The project has been extremely successful however is nearing the end of its funding stream. Continuation of Working with Nature is being sought as part of a wider Green Infrastructure project through ENRaW funding.
Recommendation	Delete and incorporate into an amended action 2.9, as part of wider funding opportunities.
NRAP Objectives	2

2.5	NPT NATURE PARTNERSHIP
Action	NPTCBC facilitates the NPT Nature Partnership which implements the Local Biodiversity Action Plan (LBAP). This is a key mechanism for species and habitat conservation in the County Borough.
Reporting mechanism	The NPT LBAP reporting spreadsheet.
Milestone year 1	Continue to provide secretariat for the NPT Nature Partnership, providing support in the delivery of targeted action.
Progress	Ongoing.
Milestone year 2	Continue to provide secretariat for the NPT Nature Partnership, providing support in the delivery of targeted action.
Progress	NPT Nature Partnership have decided to re-write the Local Biodiversity Action Plan and they will create a new reporting mechanism. A replacement system to the UK-wide 'Biodiversity Action Reporting System' from WG is pending.
Recommendation	Amend Action and Reporting Mechanism as set out below: Action: The Council facilitates the NPT Nature Partnership which implements the NPT Nature Plan. This is a key mechanism for species and habitat conservation in the County. Milestone Year 3 – Timescale and Process will be agreed with the Nature Partnership.
NRAP Objectives	1 2 3 4 5 6

2.6	AWARENESS RAISING
Action	The C&WT raise awareness of biodiversity through a variety of methods; training, public engagement (walks/talks), interpretation panels, leaflets, web pages, social media.
Reporting mechanism	Project delivery and ongoing upkeep of the NPTCBC web pages and NPT Wildlife Facebook page.
Milestone year 1	2 awareness raising projects per year; and year on year increase in visitors to the web pages and likes on the Facebook page.
Progress	As of Jan 1st 2019 NPT Wildlife Facebook had 725 followers which increased to 785 in May 15th.

4. Action Report

	Beach Festival; and The Gnoll Wildlife Explorer Trail.
Milestone year 2	2 awareness raising projects per year; and year on year increase in visitors to the web pages and likes on the Facebook page.
Progress	Craig Gwladus bio-blitz; Fen raft spider walk; As of March 2020, the NPT Wildlife Facebook page has 802 followers with an approximately 750 likes to the Group.
Recommendation	Amend Milestones: by changing likes to followers and remove hits to webpage as there is no single landing page. Two awareness raising projects per year and year on year increase in followers on the Facebook page.

NRAP Objectives	1	2	4	5
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2.7	BIODIVERSITY AUDIT
Action	<p>Undertake a biodiversity audit on land within our ownership and control, to identify where we have protected/S7 habitats and species on our land. Priority will then be given to those areas / sites where protected Section 7 habitats / species have been identified which offer the greatest benefit to biodiversity, considering one of the following options:</p> <p>1) The status quo – with no further action being taken. 2) Be brought into appropriate management for the benefit of biodiversity. This may be through: The Authority and, where necessary, suitable revenue sources can be secured by way of external funding to support and manage the identified sites. Lease to external parties. NB Any notional financial loss to the Authority needs to be reported and agreed before any lease is granted. 3) Any future disposal of a site will include relevant information from the audit so that the purchaser / tenant can comply with the relevant requirements. 4) In advance of undertaking any works and / or any material changes in land use on sites owned and controlled by the Authority, it will take into consideration the findings of the audit, taking steps to conserve and where possible enhance the biodiversity value</p>
Reporting mechanism	First report will be results of audit.
Milestone year 1	Programme of assessment to be drawn up by C&WT.
Progress	Assessment started. Stock phrases created. Sites audited looking at each valley working east to west across the county.
Milestone year 2	Assessments completed and actions put forward for the next stage of the plan.
Progress	Audit still ongoing with priority being given to sites that are being considered for change of use / management. This is a large and

4. Action Report

	complex task that will take longer to complete than originally anticipated.
Recommendation	Amend Milestones as set out below: Milestone year 3 - Assessment ongoing. Milestone year 4 - Advice provided as part of assessment followed. Milestone year 5 - Ongoing communications. Advice followed.
NRAP Objectives	

2.8	NATIONAL GUIDANCE
Action	Implement any national/regional guidance on enhancing biodiversity and ecosystems resilience through the planning system. Any new guidance will be taken into account and integrated into the system.
Reporting mechanism	C&WT Planning spreadsheet.
Milestone year 1	All national/regional guidance to be integrated into the planning system within 3 months of its release.
Progress	New guidance includes Planning Policy Wales 10 and the new guidance on bats and wind turbines.
Milestone year 2	All national/regional guidance to be integrated into the planning system within 3 months of its release.
Progress	Ongoing.
Recommendation	Retain.
NRAP Objectives	

2.9	FUNDING
Action	Apply for funding as opportunities arise, either specifically for biodiversity or as part of wider schemes delivering multiple benefits.
Reporting mechanism	As funding requirements.
Milestone year 1	As opportunities arise.
Progress	<p>Successful Heritage Fund bid for the Lost Peatlands Project £434,751 development phase, with the potential to apply for a further £1.8million HF funding with overall project cost of £2.1 million.</p> <p>Money secured from the WG GI capital grant. The Council led on the regional, multi partner project. The project included mapping demand and opportunity areas, engaging with local communities, GI design and delivery of on the ground GI infrastructure.</p> <p>Additional funding has also been secured from the Heritage Lottery Fund and Natural Resources Wales for distinct areas;</p>

4. Action Report

	Dyffryn Railway Wildlife Site and Craig Gwladus Country Park. Each were delivered in partnership with dedicated community groups: Afan Environment Volunteers and Friends of Craig Gwladus respectively.
Milestone year 2	As opportunities arise.
Progress	<p>Funding was secured for the Connecting Green Infrastructure – South West Wales Project, through the Welsh Government Enabling Natural Resources and Well-being (EnRAW). £425K was drawn down for the region, with a further application for £2.6M progressed to full application through the RDP ENRaW funding stream.</p> <p>Additional funding was secured for further delivery at Craig Gwladus Country Park as part of a long term strategy, whilst Dyffryn Railway delivered again its final year of funding.</p> <p>The Council is a collaborative partner in the Local Nature Partnership (LNP) Cymru Project, providing a supporting role for NPT’s Nature Partnership. Welsh Council for Voluntary Action (WCVA) are project lead, and was again funded through the ENRaW funding stream.</p>
Recommendation	<p>Amend action as set out below:</p> <p>Apply for funding as opportunities arise, to continue to deliver on Working with Nature, for biodiversity, or as part of strategic, multi-functional projects delivering multiple benefits.</p>

NRAP Objectives	1	2	3	4	5	6
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NRAP Objective 3: Increase the resilience of our natural environment by restoring degraded habitats and habitat creation

3.1	CURRENT MANAGEMENT
Action	NPTC areas are currently being managed to ensure their resilience.
Reporting mechanism	GIS layer kept of areas under active management.
Milestone year 1	Sites continue to be managed for the resilience of our natural environment.
Progress	Nature Conservation Sites’ GIS layer created and maintained.
Milestone year 2	There is an increase in sites being managed for the resilience of our natural environment.
Progress	There has been an overall increase in the area of land being managed through the creation of a reptile compensation site on council land.

4. Action Report

Recommendation	<p>Retain, but amend measure from ‘number of sites’ to an area based measure, and to exclude areas within the verge management scheme.</p> <p>Reporting Mechanism: reported through the KPI’s within the Corporate Plan.</p> <p>Milestones year 3 - Agree an amended KPI as part of the Corporate Plan.</p>
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NRAP Objectives	1	2	3	4	5	6
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3.2	HABITAT MANAGEMENT THROUGH DEVELOPMENT MANAGEMENT
Action	Through the development management process habitat management plans are put in place increasing the resilience of our natural environment and improving the management of S7 habitats.
Reporting mechanism	C&WT Planning spreadsheet.
Milestone year 1	Appropriate assessments of ecosystems resilience submitted through the planning process and appropriate measures to deliver improvements taken.
Progress	Ecosystem resilience assessments are being submitted for relevant planning applications, however, due to the lack of national guidance the quality and detail of this assessment is lacking.
Milestone year 2	Appropriate assessments of ecosystems resilience submitted through the planning process and appropriate measures to deliver improvements taken.
Progress	Ecosystem resilience assessments are being submitted for relevant planning applications, however, due to the lack of national guidance the quality and detail of this assessment is lacking.
Recommendation	Retain.

NRAP Objectives	1	2	3	4	5	6
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3.3	COED CYMRU
Action	NPTC are key partners in the Coed Cymru initiative, Wales’ foremost woodland organisation. Coed Cymru aims to improve the condition of Welsh woodland and integrate new woodlands into the landscape, through the provision of advice, support, innovation and access to grant aid. They bring research about the role of trees in flooding, soils and water, agricultural productivity and wider ecosystem services into practice.
Reporting mechanism	Annual funding reports.

4. Action Report

Milestone year 1	As Coed Cymru objectives.
Progress	Woodland management advice ongoing and woodland creation plans approved and implemented on private land, including local businesses.
Milestone year 2	As Coed Cymru objectives.
Progress	Landowner advice continued with plans in place for future woodland creation. Collaborated with Green Infrastructure project on Trees for Schools project – planting trees across 11 school grounds in NPT. Worked with Tai Tarian (Registered Social Landlord (RSL)) – to identify and design planting on social housing sites throughout NPT.
Recommendation	Retain.
NRAP Objectives	

3.4	AREA STATEMENTS
Action	NPTCBC will assist NRW in writing and implementing Area Statements as required.
Reporting mechanism	As required.
Milestone year 1	As appropriate.
Progress	NRW have not sought NPT input yet.
Milestone year 2	As appropriate.
Progress	Hosted an Area Statement workshop in The Quays, fed back on questions NRW required. Attended and contributed towards numerous Area Statement stakeholder events. Area Statements have now been published.
Recommendation	Amend action as set out below: The Council will assist NRW in implementing Area Statements as required.
NRAP Objectives	

Proposed new action

3.5	GREEN INFRASTRUCTURE ASSESSMENT
Action	The Council will undertake a Green Infrastructure Assessment (GIA) in line with the requirements of Planning Policy Wales (PPW) for Neath Port Talbot (NPT).
Reporting mechanism	LDP Planning Inspectorate and Welsh Government approval as part of the evidence base that will underpin the LDP.
Milestone year 3	Engagement, participation and contribution in partnership with the LDP Team to produce a GIA for the Authority.
Milestone year 4	Engagement, participation and contribution in partnership with the LDP Team to produce a GIA for the Authority.
Milestone year 5	GIA complete.

4. Action Report

Recommendation	Adopt as part of the new Plan.					
NRAP Objectives			3	4	5	

Objective 4: Tackle key pressures on species and habitats

4.1	INVASIVE NON-NATIVE SPECIES (INNS)
Action	INNS are dealt with through the development management process by requesting surveys and conditioning remedial actions where appropriate.
Reporting mechanism	Planning decision notices.
Milestone year 1	Appropriate conditions applied where INNS are identified.
Progress	Ongoing.
Milestone year 2	Appropriate conditions applied where INNS are identified.
Progress	Ongoing. There are additional activities being undertaken on Council owned land.
Recommendation	Amend action and Reporting Mechanism as set out below: Action - A proactive approach is taken to dealing with INNS including Development Management Process and treatment on Council land. Reporting Mechanism - C&WT Planning spreadsheet and BDP Spreadsheet.

NRAP Objectives	1		3	4	5	6
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4.2	AIR QUALITY
Action	The air quality implications of plans and projects are fully assessed for their potential effects on sensitive habitats and species through the HRA process.
Reporting mechanism	C&WT Planning spreadsheet.
Milestone year 1	All development proposals assessed as appropriate.
Progress	Ongoing.
Milestone year 2	All development proposals assessed as appropriate.
Progress	There have been no plans or projects that have required a HRA in the period since the Plan was written.
Recommendation	Retain.

NRAP Objectives	1	2	3	4	5	6
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4.3	GLAMORGAN GRAZING
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4. Action Report

Action	NPTCBC is currently supporting PONT to set up a Glamorgan Grazing project which allows land to be managed in a sensitive way. Whilst the project continues to be led by PONT, we will input into the project through landowner and grazier engagement, and identification of sites.
Reporting mechanism	Database will be held by PONT, with local contacts shared with C&WT.
Milestone year 1	Project set up and initial lists of grazers and landowners available.
Progress	List set up.
Milestone year 2	List is being utilised to bring sites under our ownership into conservation grazing.
Progress	PONT have lost their funding. Due to this loss of funding, the project is unable to continue.
Recommendation	Remove.

NRAP Objectives	1	2	3	4	5	6
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4.4	STATE OF NATURAL RESOURCES REPORT (SoNaRR)
Action	Review the SoNaRR report and identify key pressures for NPT.
Reporting mechanism	Report on key pressures identified via SoNaRR.
Milestone year 1	Report written.
Progress	Key pressures for NPT were identified from SoNaRR.
Milestone year 2	Any additional actions identified and actioned, or built into the next review process.
Progress	There was an interim SoNaRR published by WG and several other projects are gathering data – these will be used to identify local pressures.
Recommendation	Amend Action and Reporting Mechanism as set out below: Action: Collate all of the local information and identify local pressures. Reporting Mechanism: Report on local pressures identified.

NRAP Objectives				4		
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Objective 5: Improve our evidence, understanding and monitoring

5.1	DATA CAPTURE
Action	NPT uses a range of data capture tools and techniques. This has led to a large number of species records which are passed on to the Local Records Centre and, therefore, shared with the wider community.

4. Action Report

Reporting mechanism	Metadata from MapMate.
Milestone year 1	Maintenance of the MapMate database.
Progress	Ongoing.
Milestone year 2	Maintenance of the MapMate database.
Progress	Ongoing. NPTC Biodiversity has generated 11,785 records to date.
Recommendation	Amend Milestones - Maintenance of the MapMate database and Biodiversity GIS layers.

NRAP Objectives		2		4	5	
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5.2	SITES OF IMPORTANCE FOR NATURE CONSERVATION
Action	NPTC have a programme of identifying sites that qualify as Sites of Importance for Nature Conservation (SINC). This allows us to assess the quality of a site against national guidelines and each site will be reviewed within 10 years. Within this reporting round, we will ensure that all SINCS have been reviewed within the 10 year timescale. Following this, we will introduce a programme of, on average, 10% of SINCS being reviewed annually and QGIS layer updated and shared with SEWBRc.
Reporting mechanism	Annual SINC report produced.
Milestone year 1	Put together a programme of sites to be reviewed.
Progress	Sites identified for review on a rolling 10 year programme.
Milestone year 2	Carry out a review of all SINCS that are scheduled for review this year.
Progress	17 sites were reviewed (target 12).
Recommendation	Amend Milestones - Carry out a review of all SINCS that are scheduled for review this year. Undertake SINC surveys on new sites as necessary, designating where appropriate.

NRAP Objectives	1	2	3	4	5	6
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5.3	SURVEYS
Action	NPTCBC provides secretariat for the NPT Nature Partnership which includes a number of specialist surveyors and SEWBRc. We utilise this expertise by organising surveys for targeted sites and species.
Reporting mechanism	Evidence based report by C&WT.
Milestone year 1	Work with the Partnership to take forward specialist surveys where most appropriate.

4. Action Report

Progress	Colliery spoil biodiversity initiative 2018 (report available). Specialist invertebrate surveys identified the high quality of our coal spoil as a habitat.
Milestone year 2	Work with the Partnership to take forward specialist surveys where most appropriate.
Progress	Blue ground beetle 2019 run by Buglife. Skewen is the only area in Wales where this beetle is found. Several suitable woodland were surveyed and population estimates gathered. Craig Gwladus bio blitz 2019. With members of the NPT Nature Partnership, Friends of Craig Gwladus the species list for the site was updated.
Recommendation	Retain.
NRAP Objectives	

5.4	RECORD CENTRE SEARCHES
Action	All planning applications containing biodiversity information must be accompanied by a SEWBReC search undertaken by/on behalf of the applicant, unless agreement is reached with the C&WT that sufficient justification exists to negate this need.
Reporting mechanism	C&WT Planning spreadsheet.
Milestone year 1	All biodiversity information contained in a planning application must be accompanied by a SEWBReC search, unless agreed otherwise.
Progress	Ongoing.
Milestone year 2	All biodiversity information contained in a planning application must be accompanied by a SEWBReC search, unless agreed otherwise.
Progress	Ongoing.
Recommendation	Retain.
NRAP Objectives	

5.5	BIODIVERSITY COMPENSATION SCHEME
Action	The grant funded Biodiversity Compensation Scheme is currently researching the potential for a compensations scheme that would allow development to move along quicker by banking compensation sites.
Reporting mechanism	As grant funding reporting.
Milestone year 1	Incorporate research findings from the 2015 project into Biodiversity SPG.
Progress	Completed.
Milestone year 2	Implement SPG via the development management process.

4. Action Report

Progress	Working group set up and met. Identifying potential compensation sites but only 1 site being progressed at the moment.
Recommendation	Amend Action and Reporting Mechanism as set out below: Action - Implement the compensation scheme as set out within the Biodiversity SPG. Reporting Mechanism – C&WT Planning spreadsheet.

NRAP Objectives	1	2	3	4	5	6
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5.6	RESILIENT WALES GOAL
Action	Contribute data towards the Wales biodiversity indicators for the Resilient Wales goal of the Well-being of Future Generations (Wales) Act 2015.
Reporting mechanism	Responses.
Milestone year 1	As required.
Progress	No data has been requested by WG.
Milestone year 2	As required.
Progress	No data has been requested by WG.
Recommendation	Retain.

NRAP Objectives	1				5	6
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5.7	BIODIVERSITY PLAN EVIDENCE
Action	Evidence to be collected to ensure compliance with this Plan.
Reporting mechanism	All reporting to be gathered and collated to report on this Plan.
Milestone year 1	End of year report.
Progress	Completed and fed into this Report.
Milestone year 2	End of year report.
Progress	Completed and fed into this Report.
Recommendation	Retain.

NRAP Objectives	1	2	3	4	5	6
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NRAP Objective 6: Put in place a framework of governance and support for delivery

6.1	COUNTRYSIDE AND WILDLIFE TEAM RESOURCES
Action	There is currently enough skills and capacity in the Countryside and Wildlife Team to co-ordinate the work needed to comply with the legislation, however sustaining this in the long term will be a challenge given budgetary pressures.

4. Action Report

Reporting mechanism	This duty reporting.
Milestone year 1	Secure the temporary post on a permanent basis.
Progress	Secured new, permanent, Biodiversity Implementation Officer post including a specific remit to implement this Plan. Income funded Graduate Ecologist employed to help build internal consultancy service.
Milestone year 2	Maintain current staffing levels.
Progress	Additional staff linked to specific grant-funded project employed - Lost Peatlands (project manager, 2x part-time ecologists) - Green Infrastructure Project (Green Infrastructure Officer).
Recommendation	Amend Milestones as set out below: Milestones - Maintain current core staff levels and retain / employ additional project staff to deliver grant funded projects as and when funding becomes available.

NRAP Objectives	1	2	3	4	5	6
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6.2	NPT NATURE PARTNERSHIP
Action	Continue to support the NPT Nature Partnership, providing the secretariat, steering the objectives and collating information on member activities through the Biodiversity Officer post.
Reporting mechanism	Partnership minutes.
Milestone year 1	Continue to provide secretariat for the NPT Nature Partnership.
Progress	Ongoing.
Milestone year 2	Continue to provide secretariat for the NPT Nature Partnership.
Progress	Ongoing.
Recommendation	Amend Action as set out below: To reflect the supporting role the Biodiversity Officer has with supporting partnership actions, the following amendment to the action is proposed: Continue to support the NPT Nature Partnership, providing the secretariat, steering the objectives and supporting delivery of member action through the Biodiversity Officer post.

NRAP Objectives						6
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6.3	BIODIVERSITY CHAMPION
Action	A NPTC Councillor is appointed Biodiversity Champion and attends events/meetings as appropriate.

4. Action Report

Reporting mechanism	Attendance at regular meetings.					
Milestone year 1	Continued engagement as appropriate.					
Progress	A good working relationship has been established between the Biodiversity Champion and the C&W Team, with support provided as required.					
Milestone year 2	Continued engagement as appropriate.					
Progress	A good working relationship has been established between the Biodiversity Champion and the C&W Team, with support provided as required.					
Recommendation	Retain.					
NRAP Objectives	1					6

6.4	NPT NATURE PLAN					
Action	Through the NPT Nature Plan, maximise opportunities to deliver priorities via volunteers and partners.					
Reporting mechanism	LBAP spreadsheet.					
Milestone year 1	Spreadsheet is being updated with a continual process of new actions being added and delivered.					
Progress	Change to new Nature Plan.					
Milestone year 2	Spreadsheet is being updated with a continual process of new actions being added and delivered.					
Progress	Limited reporting whilst new Nature Plan being developed.					
Recommendation	<p>Amend action and Reporting Mechanism as set out below:</p> <p>(There is a new plan (Nature Recovery Action Plan) being written by the NPT Nature Partnership as part of the LNP Cymru project).</p> <p>Action 6.4 - Nature Recovery Action Plan</p> <p>Reporting Mechanisms: <i>Awaiting new reporting mechanisms from WG.</i></p> <p>Milestones: Delivery of biodiversity conservation as per Nature action plan/ LNP Cymru Project. Reporting as per grant requirements.</p>					
NRAP Objectives	1	2	3	4	5	6

6.5	AREA STATEMENTS					
Action	Feed into the delivery of Area Statements where appropriate.					
Reporting mechanism	As appropriate.					
Milestone year 1	As appropriate.					
Progress	NRW have not sought NPT input yet.					

5. Conclusions

Milestone year 2	As appropriate.
Progress	Hosted Area Statement workshop in The Quays, fed back on questions NRW required. Attended and contributed towards numerous Area Statement stakeholder events.
Recommendation	Remove - replicated in Action 3.4.
NRAP Objectives	

5 Conclusions

5.1 New Actions

- 5.1.1 Since adoption of the Plan, new legislation has been introduced requiring the Local Authority to act as a SuDS (Sustainable Drainage) Approving Body (SAB). The SAB requires the management of surface water drainage for new developments to comply with mandatory National Standards for SuDS. Once built and functioning in accordance with approved proposals, the SuDS are adopted by the Local Authority. One of the Standards of SuDs relates to biodiversity and consequently the C&WT are a consultee on all SABs applications in relation to the biodiversity Standard. This function is dealt with in Action 1.1 through the biodiversity advisory service.
- 5.1.2 At the time of writing, the Council is preparing a number of new strategies/assessments in relation to issues such as decarbonisation and green infrastructure. A new Action 1.8 has been included to adopt and implement general strategies as they are put forward.
- 5.1.3 The 2018 Green Infrastructure project resulted in a suite of bespoke GIS layers and plans identifying demand and opportunity maps for a number of different interventions for differing needs. These maps will feed into the Green Infrastructure Assessment (GIA) which is now covered by a new Action 3.5.

5.2 Overview

- 5.2.1 The Council has a long tradition of environmental conservation through dedicated staff, strong policy implementation and links to the wider community. The Plan has allowed the Authority to further embed biodiversity into decision making outside of the traditional service areas. As this was a new plan the first 1 ½ years has primarily focused on getting to know about wider services being delivered by the Council and details of corporate governance. Appointing a specific officer to bring together The Plan ensures that there is no duplication and all areas of work are covered.
- 5.2.2 Local Authorities are large and extremely multi-functional and consequently it has taken longer than anticipated to carry out the internal service area audit and the land audit. These actions are ongoing with milestones for the updated Plan to reflect this ongoing activity.
- 5.2.3 The Council were one of the first Local Authorities to publish a Biodiversity Duty Plan. Implementation of the plan is led by the Biodiversity Implementation Officer

and it complements other duties including supporting the NPT Nature Partnership and internal collaborations. Although some actions have taken longer to fulfil than expected, progress has been made on all actions.



APPENDIX 2

First Stage Assessment: Integrated Impact Assessment (IIA)

Integrated Impact Assessment (IIA) - First Stage

1. Details of the initiative

Initiative description and summary: Neath Port Talbot Biodiversity Duty Plan (BDP) 2017 Implementation Report
Service Area: Planning Policy, Planning and Public Protection
Directorate: Environment and Regeneration

2. Does the initiative affect:

	Yes	No
Service users	✓	
Staff	✓	
Wider community	✓	
Internal administrative process only		✓

3. Does the initiative impact on people because of their:

	Yes	No	None/ Negligible	Don't Know	Impact H/M/L	Reasons for your decision (including evidence)/How might it impact?
Age		✓				Biodiversity affects all generations and all areas of society, the actions set out within the Biodiversity Duty Plan (2017), which the attached Implementation Report monitors progress against, encourages inclusivity and involvement. Many of the projects aim to bring communities together creating and improving spaces (i.e. open space, Green Infrastructure (GI), Nature Reserves) for all members of society to meet, explore, exercise and learn. Research states being close to nature improves mental health and wellbeing.
Disability		✓				
Gender Reassignment		✓				
Marriage/Civil Partnership		✓				
Pregnancy/Maternity		✓				
Race		✓				
Religion/Belief		✓				
Sex		✓				
Sexual orientation		✓				Implementation of the actions will be inclusive and will involve the Countryside and Wildlife Team (C&WT) working with all

						staff / sections throughout the Council, the wider public and a wide range of partner organisations including those from the public, private and community / voluntary sectors.
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4. Does the initiative impact on:

	Yes	No	None/ Negligible	Don't Know	Impact H/M/L	Reasons for your decision (including evidence)/ How might it impact?
People's opportunities to use the Welsh language		✓				<p>All of the actions contained within the 2017 BDP adhere to the Welsh Language Standards (No. 1) Regulations 2015 and any amendments to actions or new proposed actions recommended by the Implementation Report will also adhere to these Regulations.</p> <p>As all of the technical names of species and habitats are required to be translated by the Regulations, as a result, it is felt that the opportunity for people to use and expand upon their Welsh Language vocabulary has increased providing a positive impact (albeit low) on people's use of the Welsh language.</p>
Treating the Welsh language no less favourably than English		✓				<p>All of the actions contained within the 2017 BDP adhere to the Welsh Language Standards (No. 1) Regulations 2015 and any amendments to actions or new proposed actions recommended by the Implementation Report will also adhere to these Regulations.</p> <p>All communication via the Authority's social media platforms and websites; radio broadcasts and reports etc... (whether written, visual or verbal), is translated into Welsh to ensure that the Welsh language is treated no less favourably than English.</p>

5. Does the initiative impact on biodiversity:

	Yes	No	None/ Negligible	Don't know	Impact H/M/L	Reasons for your decision (including evidence) / How might it impact?
To maintain and enhance biodiversity	✓				H	This is the remit of the 2017 BDP and Report. Actions contained within the BDP and monitored, with recommendations, through the Implementation Report, ensures that the Authority meets its statutory duty to

						<p>maintain and enhance biodiversity as set out within the Environment (Wales) 2016 Act.</p> <p>One of the actions incorporated within the 2017 BDP was to include the impact on Biodiversity into the Council's Integrated Impact Assessment (IIA) to improve the Council's decision-making process.</p>
To promote the resilience of ecosystems, i.e. supporting protection of the wider environment, such as air quality, flood alleviation, etc.	✓				H	<p>This is one of the aims of the 2017 BDP and Implementation Report. Actions contained within the BDP and monitored, with recommendations, through the Implementation Report, ensure that the Authority meets its statutory duty to promote the resilience of ecosystems, supporting protection of the wider environment, as set out within the Environment (Wales) Act 2016.</p> <p>Numerous projects and initiatives organised by the C&WT and partners to contribute towards meeting the Authority's Biodiversity Duty (as required by the Act) are set out within the 2017 BDP with progress and further recommendations for improvement listed within the Implementation Report. For example, the Connecting Green Infrastructure – South West Wales regional project.</p>

6. Does the initiative embrace the sustainable development principle (5 ways of working):

	Yes	No	Details
Long term - how the initiative supports the long term well-being of people	✓		By monitoring the actions set out within the 2017 BDP the Authority can review the progress that is being made towards achieving its Biodiversity Duty. Progress has been made on all of the actions within the BDP with the majority, if not all, having a direct or indirect link to supporting the long-term well-being of people. Through conserving and enhancing Biodiversity now, will benefit the long term well-being of future generations.

<p>Integration - how the initiative impacts upon our wellbeing objectives</p>	✓		<p>Positive action on biodiversity is far reaching and all-encompassing and therefore will have a positive impact on the Council's wellbeing objectives. A species and habitat-rich environment will ultimately improve the well-being of children, young people and all adults living in the County Borough.</p>
<p>Involvement - how people have been involved in developing the initiative</p>	✓		<p>Whilst officers from across the Council's Environment Directorate have been mainly involved in developing the actions included within the 2017 BDP, the progress review of the actions contained within the Plan has been undertaken by the Biodiversity Implementation officer within the C&WT who ensures that the data on the actions is appropriately stored, assessed and accurately reported.</p> <p>Implementation of the Biodiversity Duty will be delivered through the functions of the Authority as a whole. There are a number of established internal and external working groups where issues are raised, information disseminated and best practice shared. The Working Groups, together with partners, stakeholders, volunteers and Members (promoted by the Biodiversity Champion) will provide the mechanism to ensure the BDP and the accompanying Implementation Report remains fit for purpose and responsive to changes in circumstances.</p>
<p>Collaboration - how we have worked with other services/organisations to find shared sustainable solutions</p>	✓		<p>Achieving the identified actions set out within the 2017 BDP and subsequent revisions, will require significant contributions internally from across the Council and externally from a wide variety of partner organisations, including cross-boundary collaboration where appropriate. Partner organisations will include those from the public, private and community/voluntary sectors.</p>
<p>Prevention - how the initiative will prevent problems occurring or getting worse</p>	✓		<p>By seeking to address the loss of biodiversity and meet the Council's Section 6 Duty, the Implementation Report provides recommendations on how actions can be improved for tackling issues and barriers for implementation at the local level. The various actions (individually and collectively), will seek to maintain and enhance biodiversity and in so doing promote the resilience of ecosystems. The ongoing monitoring and evaluation of actions through the Implementation Report will enable the Council to limit any unintended consequences and help mitigate any negative impacts.</p>

7. Declaration - based on above assessment (tick as appropriate)

A full impact assessment (second stage) is not required	✓
Reasons for this conclusion	
<p>Equalities – Biodiversity affects all generations and all areas of society. Implementation of the actions will be inclusive and will involve the Countryside and Wildlife Team working with all staff / sections throughout the Council, the wider public and a wide range of partner organisations including those from the public, private and community / voluntary sectors.</p> <p>Welsh Language – All of the actions contained within the 2017 BDP adhere to the Welsh Language Standards (No. 1)) Regulations 2015 and any amendments to actions or new proposed actions recommended by the Implementation Report will also adhere to these Regulations. All communication via the Authority’s social media platforms and websites; radio broadcasts and reports etc... are translated into Welsh and the technical names of species and habitats are also translated which increases people’s opportunity to use and expand upon their Welsh Language vocabulary.</p> <p>Biodiversity – This is the remit of the 2017 BDP and Implementation Report. Actions contained within the BDP and monitored, with recommendations, through the Implementation Report, ensures that the Authority meets its statutory duty to maintain and enhance biodiversity as set out within the Environment (Wales) 2016 Act. One of the actions incorporated within the 2017 BDP was to include the impact on Biodiversity into the Council’s Integrated Impact Assessment (IIA). Additionally, numerous projects and initiatives organised by the C&WT and partners contribute towards meeting the Authority’s statutory duty to promote the resilience of ecosystems, supporting protection of the wider environment.</p> <p>Well-being of Future Generation (5 ways of Working) – the BDP 2017 Report embraces all five ways of working. The Implementation Report provides progress achieved on the 2017 BDP actions and recommendations for future improvement in order to meet the Council’s Biodiversity Duty. The BDP and accompanying Implementation Report positively integrates with the Council’s well-being objectives; involves people and partners in its development and implementation; and seeks to prevent problems getting worse.</p>	

	Name	Position	Date
Completed by	Lana Beynon	Planning Policy Manager	16/09/2020
Signed off by	Ceri Morris	Head of Service	20/09/2020

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