

Minister for Skills and Science

Economy, Infrastructure & Skills Committee

1. This paper sets out some of my priorities and recent actions ahead of my meeting with the Committee on 27 September.

United and connected

2. To date, the Superfast Cymru project has provided access to fast fibre broadband to over 653,000 premises in Wales. BT has assured us that it remains on target to deliver its contractual obligations of providing access to superfast broadband to over 690,000 premises by the end of this year.
3. We are now working to develop a successor scheme to Superfast Cymru to extend the availability of superfast broadband to those premises that won't be provided with access to superfast broadband under either Superfast Cymru or the commercially driven roll-outs of telecommunications companies in the next three years.
4. In order to comply with state aid rules, an open market review must be undertaken to identify those premises that are unable to access a superfast broadband connection under the Superfast Cymru project or the commercial roll-outs of telecommunications companies. The open market review undertaken earlier this year provisionally identified 98,000 such premises.
5. We consulted on this list of premises in July and my officials are now analysing the results. We intend to carry out a procurement exercise later in the autumn with a view to the new project starting in early 2018.
6. The successor scheme will be underpinned by a public sector budget of up to £80 million which in turn, will leverage private sector match funding to further extend broadband coverage to the hardest to reach premises across Wales by 2020.
7. For those who cannot yet get fibre or a fast traditional broadband connection, the Access Broadband Cymru scheme helps applicants get faster broadband. Since the scheme began in January, 2016, 581 residents and businesses have been provided with funding.
8. Businesses can also use the Ultrafast Connectivity Voucher scheme to help meet the initial capital costs to get ultrafast broadband. Following feedback from businesses that they would like to connect at sub 100Mbps speeds, the scheme has been adapted to provide greater flexibility for mid-range broadband. So far 22 businesses have taken advantage of this scheme.
9. While telecommunications policy is not devolved to Wales, I hosted a round table meeting of industry representatives in January to discuss enhancing mobile coverage and capacity. As a result, I announced my intention to publish a mobile action plan for improving mobile connectivity in Wales using the levers at the disposal of the Welsh Government. We are currently finalising the plan with the mobile industry and it will be published shortly.

10. Both National Survey for Wales (NSW) and Office for National Statistics (ONS) figures show positive progress to reducing levels of digital exclusion across Wales. However, we know many more people lack the basic digital skills to fully benefit from digital technologies. These include the ability to manage information and problem solve online, communicate safely, transact securely and create basic digital content.
11. My officials continue to report progress using the National Survey for Wales Internet Use figures, but are also looking to other data resources, which allow reporting and tracking progress for Basic Digital Skills levels.
12. Our digital inclusion programme, Digital Communities Wales (DCW) trains and supports organisations to engage digitally excluded people with technologies and encourages recruitment of volunteers to act as digital champions.
13. In the first two years (to 31 March 2017) 733 organisations were supported and over 86,000 individuals engaged with technology. DCW provided training to over 1,400 front line staff and supported over 1,200 volunteers.
14. Following an independent evaluation, I have extended DCW until 31 March 2019. From 1 April 2017 to date, DCW has assisted 61 further organisations, supported 7,517 end users through organisations assisted, placed 117 volunteers, and provided training to 447 front line staff and volunteers.
15. Following the NSW publication in June, officials are now reviewing the document, with the intention to publish a living 'Strategy' in late 2017, which will reflect progress against 2017 targets, recognise the Programme for Government commitment (helping 95% of people gain at least the basic digital skills needed for the 21st century) and set new targets for 2019 and 2021. It will highlight the continued growth of online public services, changing technologies, continue to raise the profile of digital inclusion and highlight links to related policy areas and programmes which help towards the agenda.
16. This is a challenge that Government cannot tackle alone – it is something all sectors and wider society must fully embrace.

Prosperous and secure

17. Taking Wales Forward commits the Welsh Government to 're-shaping employability support for job-ready individuals, and those furthest from the labour market, to acquire the skills and experience to gain and maintain sustainable employment'. The development of a cross-Welsh Government Employability Delivery Plan for Wales underpins this commitment along with a new employability offer, 'Working Wales', which will be delivered from April 2019. Working Wales will consist of a new programme for adults and two new programmes for young people:
 - the **youth engagement** programme will be targeted at individuals aged 16-17 on entry, who are not in education, employment or training and who are

assessed as having significant or multiple barriers preventing them from engaging sustainably in education, training or employment with training

- the **youth training** programme will deliver work experience for young people motivated to work but who need improved employability skills, clearer career focus and better job related skills.

18. These two new youth programmes will replace the current Traineeships programme which is due to end on 31 March 2019.
19. The adult programme will be informed by labour market intelligence from the Regional Skills Partnerships (RSPs) and by joint working with the Department for Work and Pensions (DWP), including the DWP Work and Health Programme in Wales. Working Wales will use a wide-ranging approach to identify the barriers an individual might face in gaining and sustaining employment. It will use shared tools to streamline referral to the right employability support and track individuals from initial enquiry into employment. The new programme will support the Valleys Taskforce initiative and complement community programmes being delivered in some of the more deprived areas of Wales
20. The programme will use the procurement framework between the Welsh Government and Careers Wales to enhance current advice and guidance for adults.
21. It will be delivered in conjunction with the existing Communities and Tackling Poverty programmes which will continue to focus on those furthest away from the labour market. The Committee will also wish to note that from April 2018, the Cabinet Secretary for Communities & Children will introduce a grant to develop new infrastructure to support people with complex barriers to employment.
22. We will work across Welsh Government to ensure:
 - a focus on the needs of the individual
 - a seamless approach to support people who face a multitude of barriers
 - provision of targeted support to overcome barriers identified
 - greater access and engagement through joint working arrangements
 - effective and continued mentoring, monitoring and tracking.
23. Obtaining a clear picture of the strengths and barriers clients face at the outset will enable Careers Wales case workers to support their client's journey into the labour market more effectively. A common and shared categorisation tool will assist as part of the identification of barriers, results from which will inform the level of support needed.
24. While we transition to delivery of new programmes my officials are looking at what we can do now to better support individuals into employment. Transition arrangements will focus on making amendments to our current employability programmes for the interim period up to April 2019 and delivering a range of trial activity to support the Valleys Taskforce agenda and inform development of the Employability Delivery Plan.

25. We recognise that this cannot just be about support for individuals. We want to support employers to recruit and develop talent within their business, boost productivity and give local people the opportunity of better jobs closer to home.
26. We are agreed as a government that, through using public procurement in a more creative and joined up way, we can support our communities to be more resilient in the face of the economic challenges that lay ahead by creating more sustainable local and regional economies across Wales.
27. Through our Better Jobs Closer to Home programme we are working with the Wales TUC to ensure that the benefits of major investment are recycled back into Welsh communities to support local supply chains and stimulate investment in deprived communities.
28. Elsewhere, we have made various strategic Research and Development (R&D) partnerships with businesses in Wales. Last month, IQE plc became Wales' first unicorn company with the help of 3 years' Welsh Government R&D support for its vertical-cavity surface-emitting laser (VCSEL) technology.
29. We have also provided funding for R&D for
- Support for 3 projects at **Renishaw** at Miskin: an embedded flatness gauge; research to achieve greater precision in a single neurosurgical system; and ongoing support for a biomedical project currently being appraised.
 - **Aston Martin** at St Athan: Significant support to develop the DBX AM8, world-class leading 4WD SUV, as well as subsequent models.
 - **SPTS Technologies** at Newport: On-going support to develop a flexible modular system for manufacturing the latest generation of integrated circuits with smaller, more compact features and multi-layer/3D architecture. This will provide a significant technical advance over the systems currently available, and to place SPTS at the leading-edge of the industry for several years. This is proving a real success, with SPTS' turnover reaching £200m in its most recently filed account ending 31 Dec 2015.
 - **Riversimple** at Llandrindod Wells: Significant support their development of a fuel-cell powered electric vehicle
30. In addition, Tata Steel has received significant support for its development of a new steel making platform to make advanced high strength steel products. This support is tailored to the capabilities of the plant at Port Talbot. Tata is looking to Swansea University to be the focal point for its own steel R&D in the UK; its £1 billion, ten-year investment plan will be centred at the Port Talbot hub and its downstream business units.
31. Tata's decisions are set against an on-going strategic programme of investment in the steels and metals sector infrastructure, all designed to future proof the UK industry's products, supply-chains and technology.
32. Meanwhile we are also investing in the Compound Semiconductor Cluster. The cluster will create critical mass in the supply-chain by bringing together next-generation semiconductor materials and end-user applications (5G smart

phones, the Internet of Things, tele-health, autonomous vehicles, location-based services).

33. Investment in infrastructure to date has been in four pillars to bridge the “valley of death” between early stage academic research and commercial activity. WG’s initial investment of £12m has resulted in the following:

- a £90M Institute for Compound Semiconductor Technology, established at Cardiff University’s Maindy Campus.
- a £42M Compound Semiconductor Centre at St Mellons operating as a joint venture between IQE plc and Cardiff University currently employing 76.
- a £150M investment by InnovateUK and partners in a Compound Semiconductor Applications Catapult.
- a £10M Future Compound Semiconductor Manufacturing Hub at Cardiff University funded by a UK Research Council.

34. Sêr Cymru has helped us to leverage £50 million of UK funding through Professor Diana Huffaker, a world-renowned compound semiconductor expert. The initial elements of Sêr Cymru – the ‘Star’ Research Chairs and the research networks – have won some £67.1 million research income for around £19.7 million Welsh Government spend. The latest elements have so far offered some 80 awards with around 30 in the pipeline. Fellows are working alongside industry partners, such as Rolls Royce, TATA Steel and Lockheed Martin as well as several SME partners and third sector organisations across Wales.

35. Sêr Cymru is not planned as a short-term solution, despite some quick wins. It can take a decade to build and fine-tune a successful research team, so it is crucial that both we and our partners in higher education maintain our effort.

36. My officials are also working with the Department for Business, Energy & Industrial Strategy (BEIS) to offer of joint funding (up to £20 million) for a Thermal Hydraulic Research and Test Facility. It has signed a Memorandum of Understanding with us on this aspect of their nuclear research programme. Its project budget for this (including the preliminary scoping and design work as well as construction) is up to £30 million to add to our up to £20 million and potentially other contributions from other sources will deliver a national facility of £50-60M in North Wales.

37. The thermal hydraulic facility will be a UK National Nuclear Thermal Hydraulic Facility, located ideally at M-SParc on Anglesey.

38. This aligns with the business requirements of Hitachi who need a UK based nuclear thermal hydraulic facility to test the Advanced Boiling Water Technology that will be deployed at Wylfa Newydd, but which could also be available to other technology vendors.

39. Such a facility would be one of genuine UK strategic importance to the multi billion pound UK Nuclear New Build programme and support the safe and efficient operation of plants for more than 60 years.

40. The host location can be expected to be able to realise significant benefits like high quality employment, facilities to support wider advanced manufacturing, opportunities for inward investors, SME spin-outs, and a stimulus to academic excellence.
41. Parallel to this we will soon be investing two nuclear related research chairs in Bangor through Sêr Cymru
42. In addition, Wales has the fastest growing digital economy outside London according to a report on the sector by law firm Nockolds, with the number of digital enterprises in Wales jumping by 9.2% in 2015. The strong performance of the ICT sector has helped create, safeguard or assist more than 9,300 high end jobs over a 6 year period from 2010 using Welsh Government support mechanisms. 4,346 new inward investment jobs were announced as a result of a number of major projects including CGI, Alert Logic, General Dynamics UK, Capgemini and BT. The ICT Sector's performance in 2015/16 and 2016/17 accounted for almost 30% of all Foreign Direct Investment (FDI) projects recorded for Wales, indicative of the growing prominence of technology in the economy.

Healthy and active

43. The Cabinet Secretary for Economy & Infrastructure and I have approved the development of a repurposed vision and mission for the Life Sciences Hub Wales Ltd. This will include developing opportunities for creating value from NHS-Industry engagement.
44. In May 2017 we established a Ministerial Task and Finish group with the task to develop this vision and mission. This group includes expertise to reflect the specific areas of business and commerce, entrepreneurship, multinational companies and the NHS.
45. The draft working vision is for the Hub to be "internationally recognised for creating value across the health and care system in Wales through building a dynamic and prosperous innovation ecosystem".
46. The benefits of this approach will reduce the resource required within the NHS and create value through new product and service adoption. This will result in efficiency savings, patient benefits and cost savings to the NHS and sustainable economic growth (job creation, SME/spinout development, FDI) for healthcare and life sciences industries.
47. The Group is currently carrying out stakeholder engagement activities to test emerging principles and direction of travel. Targeted focus groups aim to identify ways to enhance partnership working and collaboration with stakeholders in relation to repurposing of the Life Sciences Hub. They will allow the Group to understand stakeholders needs better.
48. I expect the Group to report to me in the autumn.

Ambitious and learning

49. The National Science Academy (NSA) grant-funds science and engineering engagement activity, to interest our young people in science and to recruit to science-related study and careers. NSA has now deployed some £2.7 million for 20 programmes designed to reach over 186,000 students at over 870 events, with 462 development events for 2800 science teachers too, by early 2018. As part of its strategic approach a number of these programmes are focused largely on encouraging more girls to study science and consider careers in science and technology careers.
50. I have written to the Chairs of Careers Wales and of the Business Wales Advisory Board welcoming their engagement in work to explore options for closer alignment or integration between Careers Wales and Business Wales. Against a backdrop of public sector spending restraint it is imperative that we explore ways to innovate and release efficiency saving while continuing to support valued services to clients and citizens.
51. The options appraisal process will take several months to complete and, with the cooperation of the Careers Wales Board and Business Wales Advisory Panel, we hope to complete the process early in the New Year. The options appraisal will be robust and will be used to inform any future decision making.
52. Irrespective of what emerges, there are tangible benefits from closer alignment and working around digital transformation and services. These are being progressed in parallel with wider options appraisal activity.
53. Careers Wales is moving forward positively with the implementation of their Vision for service delivery “Changing Lives”, commencing introduction of new tools and services to better link schools and employers and new delivery models for young people in schools.
54. Services to those in education have been under pressure in recent years as Careers Wales has had to stretch services to meet multiple priority client groups. However, Careers Wales received a clear message that greater emphasis needed to be returned to work in schools with young people when they consulted on their delivery vision with stakeholders. This focus is central to the remit issued to Careers Wales this year. Significant change should be visible from September with more careers advisers working in schools to help young people understand their options and make smart and well informed choices.
55. A new Career Discovery Model is being introduced as part of major service transformation set out in company’s vision ‘Changing Lives’. The new approach will improve integration tools, resources and support - helping young people make well informed choices and make strong career plans. Developing high quality digital services will allow Careers Wales to use its adviser’s capacity better, focussing and targeting input where it is needed.
56. Careers Wales is making significant progress to develop a digital service offer. In September a new database called the Education Business Exchange will be rolled out. This will connect schools and employers to enable more effective

education business links. The Valleys Taskforce area will be prioritised at the start of the academic year as a starting point for a national roll out during 2018. A demo site of the 'new' careerswales.com website is now being tested with users. Careers Wales have also launched a series of highly successful webinar events allowing employers such as Airbus and NHS to connect with schools across Wales.

57. In relation to skills development, we have established a new governance structure which enables the employer-led Wales Employment and Skills Board (WESB) to report directly to the Council for Economic Development (CED) on employment and skills issues. This new working arrangement provides the Welsh Government with an enhanced strategic perspective on skills and will strengthen links with business, social enterprise and trade unions to influence policy across a number of areas relevant to skills and the wider economy. Each Regional Skills Partnership (RSP) Chair is a full member of WESB.
58. The RSPs produce an annual employment and skills plan, identifying priorities for their region based on employer need. These plans identify key economic sectors and are driving planning decisions for providers and providing a critical evidence base from which to make skills investment decisions. WESB will have a role in overseeing the regional priorities put forward by RSPs through these plans.
59. The plans serve as the employment and skills evidence for the City Regions and Growth Deals. Each RSP has developed strong ties with their respective City Region and Growth Deal structures, which are reflected in their governance arrangements. WESB also have a role in the alignment of activity to City Deal and Growth Deals.
60. The Welsh Government is working with the other nations of the UK to minimise the impact of divergences in skills policies on those employing, working and learning across the UK borders. Following the UK Government's decision not to fund or mandate the use of National Occupational Standards (NOS), the three Devolved Administrations (DAs) established a system to ensure the continued portability and transferability of occupational competence of learners across regions, nations and sectors, and thereby support employers operating or recruiting across UK borders. The DAs annually commission Delivery Partners across all sectors to undertake the review and development of NOS and Apprenticeship Frameworks to ensure they are up-to-date and meet the needs of industry. The DAs are also forging positive relationships with the Institute of Apprenticeships (IFA) in England in an effort to align occupational standards. As a result of an independent review of NOS in 2016 a 5-year plan is being developed which seeks to align standards across borders. This consists of a NOS Communication Plan and proposed work to improve the current, outdated NOS Database, and implement a new NOS Database during 2018/19.
61. The Welsh Government Skills Policy is aimed at aligning apprenticeships to the needs of the Welsh economy. We are already working with employers to expand and strengthen routes in STEM, the digital industries, information technology, construction and financial services.

62. In February 2017, I published the Welsh Government's Apprenticeships Skills Policy, Aligning the Apprenticeship model with the needs of the Welsh economy, which responds to these challenges. Not only is the Welsh Government committed to deliver a minimum of 100,000 quality all age apprenticeships over the current Assembly term, we will prioritise our investment in:
- addressing skill shortages through developing apprenticeships in growth sectors and emerging occupations in line with priorities determined by Regional Skills Partnerships (RSPs)
 - developing higher level skills - focusing on apprenticeships at level 3 and above particularly in science, technology, engineering and professional routes, where returns tend to be higher
 - increasing the take-up of apprenticeships amongst 16-19 year olds, reflecting Welsh Government commitment to supporting younger apprentices
 - delivering a larger number of apprenticeships through the medium of Welsh and/or bilingually.
63. Meanwhile the UK Apprenticeship Levy is due to come into force from 6 April 2017. The levy conflicts with areas of devolved responsibility, completely overlooks and undermines our very distinctive and strong approach to supporting apprenticeships in Wales.
64. The UK Government state that we will be getting £128m, £133m and £138m over the next three years. This is not new money. The UK Government have cut public funding for skills and apprenticeship budgets and replaced it with this tax. To deliver our priorities we will be increasing investment in apprenticeships from £96m to £111.5m for 2017-18, meaning that we are actually making additional investment in Welsh apprenticeships.
65. The apprenticeship reforms in England and the introduction of the Apprenticeship Levy has seen more demand from employers, especially in the Public Sector and UK wide companies wishing to be involved in the development of our apprenticeship frameworks. We are therefore reforming the mechanism for revising frameworks.
66. The levy will disproportionately impact on the Welsh public sector. The Welsh Government estimates that Welsh public sector employers will have to pay the UK Treasury £30m per annum.
67. My officials are working closely with public sector organisations across Wales to explore how the Apprenticeship programme can better support their workforce needs, including: Local Authorities, NHS Wales, Fire and Rescue Service, Office for National Statistics (ONS) and Driver Vehicle Licencing Authority (DVLA).
68. The WESB has agreed to establish an Apprenticeship Employer Advisory Board, initially for 12 months, to look at priorities and framework infrastructure. Things are changing across the system but we are clear on the outcomes we require from this employer group.
69. We have commissioned a range of new Apprenticeship Frameworks to deliver apprenticeships across key sectors of the Welsh economy, where there is

employer support for elements of English Apprenticeships, we will look to adopt them in Wales – depending whether they align with our priorities and include qualifications.

70. The Apprenticeship Skills Policy includes an action to develop Higher Apprenticeships with Degree level qualifications. In December 2016, the Higher Education Funding Council for Wales (HEFCW) invited plans from institutions to develop degree level qualifications which could form part of an apprenticeship. The offer was restricted to an interest in Engineering, Advanced Manufacturing and IT/ computing.
71. Eleven HE/FE institutions directly funded by HEFCW have shown an interest in areas such as: Control Instrumentation, Power Engineering Material Science, Digital Media, Data Science, Cyber Security, Software Engineer and Network Engineer.
72. Sector Skills Councils have been deployed in order to manage and control the architecture for these new apprenticeship frameworks and ensure employer buy in. All indications are that demand and need from employers will be considerable. Unit costs will determine the types of volumes we can support and we will be subject to the financial constraints within the Apprenticeship Budget. For the first pilot phase we are working on the basis of paying 100% costs on the basis of that many employers believe they have already paid for their training via the Apprenticeship Levy and to pump prime the system.
73. We have committed to producing guidance on funding and delivery during September 2017. A full options appraisal is being developed by officials and an internal task and finish group will scrutinise options and make recommendations to me in readiness for the publication of funding planned for September 2017.
74. We have also developed a new approach to investing in the future of our valleys with the creation of a new Shared Apprenticeship Programme which will engage and empower employers and local communities within Rhondda Cynon Taff, Merthyr Tydfil, Caerphilly, Blaenau Gwent and Torfaen. The programme will establish the Valleys Group Training Association that will employ apprentices across the valleys taskforce area. Its key functions will be:
 - coordinate and manage the recruitment and employment of the apprentice in the valleys areas within key STEM related subjects or approved subjects where market failure within that locality has been identified
 - promote the opportunity of the Shared Apprenticeship Programme to SMEs – demonstrating the benefits to business of sharing the resource over a period of time, thus increasing business capacity and potentially full-time employment opportunities, where traditional programmes have failed or where funding has expired
 - develop partnerships with local training providers, colleges & universities to provide additional skills and training within the learning pathway
 - engage with schools to promote recruitment of apprentices for the sector, demonstrating the proposed pathway as being a viable career opportunity,

raising aspirations with both male/females and fulfilling the local strategy to engage and reduce NEETS within the 16-24 age cohort.

Prosperity for All: the National Strategy

75. The Welsh Government will shortly be publishing a simple, cross-government national strategy on Prosperity for All. It will cover activity over this term and lay the foundations for further action over the longer term.

76. The strategy will set out the steps we will take and priority areas to focus work in the short term to lay the foundations for prosperity for all.

77. My portfolio will have a key part to play in ensuring we achieve our ambitions.

Julie James AM

Minister for Skills and Science

September 2017