Welsh European Funding Office

European Structural Funds programmes 2014-2020

WEST WALES AND THE VALLEYS

EUROPEAN REGIONAL DEVELOPMENT FUND

OPERATIONAL PROGRAMME

DRAFT

WORKING DRAFT: 21 NOVEMBER 2013

This document is a WORKING DRAFT and does not represent the final Operational Programme. It is still subject to negotiation with the European Commission and some elements are still being edited to reflect changes to regulations and guidance and to reflect the on-going ex-ante evaluation process. This document will be periodically updated and published during the negotiation process to ensure the latest WORKING DRAFT is available to our partners.

This WORKING DRAFT is being made available to assist in the timely development of project proposals and the information within is only to be used on this basis. Changes will be inevitable as part of the negotiation process and contact should be made with WEFO to discuss project ideas before placing too much reliance on the content of this or associated DRAFT documents.

These proposals are provided for INFORMATION ONLY and are the result of extensive consultation over 2 years. No further views are sought from partners, with the emphasis now needing to be on negotiation with the European Commission and timely delivery.
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Section 1

Strategy for the Operational Programme’s contribution to the Union Strategy for Smart, Sustainable and Inclusive Growth and the achievement of Economic, Social and Territorial Cohesion. (Article 24 (1) and Article 87(2) (A) CPR)
1.1 Strategy for the operational programme’s contribution to the Union strategy for smart, sustainable and inclusive growth and to the achievement of economic, social and territorial cohesion

Introduction

1. The UK-wide chapter of the UK Partnership Agreement sets out the rationale for the selection of common Thematic Objectives across the UK, including analysis of the disparities, needs and growth potentials for the UK relative to the EU and rest of the world. The Welsh Chapter of the UK Partnership Agreement provides further detail on disparities, needs and growth potentials where Wales differs from the UK context and provides justification for the selection of the Thematic Objectives upon which this Operational Programme is based. The Partnership Agreement has already considered those links to the UK Country Specific Recommendations and the Commission Position Paper on the UK in coming to a justification for the selection of the main Thematic Objectives.

2. This strategy seeks to build on the analysis included in the UK Partnership Agreement and does not revisit the case for the selection of Thematic Objectives. This strategy will set out justification for the Priority Axes, Investment Priorities and Specific Objectives for the programme area.

3. All parts of the programme will contribute to territorial and social cohesion and will be assessed against these at a project level. Further detail is provided in the Priority Axes and Horizontal principles, but specifically this will be achieved in two key ways:

   a. by strengthening the economy – through increasing the role of R&I, boosting entrepreneurship and rebalancing the economy towards the private sector. Thus by contributing to reducing the gap between the GVA in WWV and the rest of the UK/EU, the Programme will be contributing to the goal of territorial cohesion at Union level.

   b. by creating employment opportunities in the private sector and access to employment through infrastructure improvements, the Programme will provide routes out of poverty thus contributing to social cohesion. The most important way of addressing poverty is to increase access to employment and SMEs are likely to be a key source of employment growth, particularly in a time of public sector retrenchment.

Investment Approach

4. We are clear that future EU programme resources will need to be more concentrated if they are to have a greater transformative effect on Wales’ economy and labour market. The ERDF programme will be driven by an unequivocal focus on the creation of sustainable jobs and economic growth.

5. A focus on sustainable jobs and growth does not mean economic growth to the detriment of the environment or of the poorest and most vulnerable – it is
economic growth that properly considers and incorporates social and environmental opportunities. This is the central organising principle of the Welsh Government\footnote{To see: One Wales: One Planet, the Sustainable Development Scheme for Wales (http://wales.gov.uk/topics/sustainabledevelopment/publications/onewalesoneplanet/); and White Paper setting out proposals for a Sustainable Development bill (http://wales.gov.uk/consultations/sustainabledevelopment/sdwhitepaper/)}, as it is these programmes: we are looking for Sustainable Development which achieves a balance between addressing economic, environmental and social needs, and opportunities for growth and jobs.

6. Our investment approach will take account of the specific role that the programme can play in unlocking opportunities for economic growth alongside the investments of the private and third sectors. This means recognising that the investments made by this programme are not going to address the structural weaknesses and opportunities in the Welsh economy and labour market alone – a much bigger investment machinery needs to be mobilised. The programme can, however, have a key and strategic role in leveraging that additional investment to contribute towards the transformational changes we are seeking. This can be done by helping to improve the conditions for that investment to take place, in particular through addressing some of the bottlenecks and barriers to growth and helping de-risk investment opportunities.

Priority Axis 1: Research and Innovation

7. Both Science for Wales and Innovation Wales (which together form the Welsh Smart Specialisation Strategy) provide a clear policy focus for this priority. They stress the need to promote innovation across Wales and in all sectors of the economy, to build capacity and promote excellence in research and innovation, and to seek new global and digital opportunities. The strategy also sets out areas of specialisation which can provide a focus for investments and the development of excellence and clusters. These are broadly organised under the headings of ‘Grand Challenge’ areas, which align with UK and EU policy priorities:

- **Life Sciences and Health** (for example Patient data records, Wound healing, e-health or stem cell research);
- **Advanced Engineering and Materials** (e.g. Photonics, Maintenance Repair and Overhaul in aerospace); and
- **Low Carbon, Energy and Environment** (e.g. Smart living, eco innovation, or low-carbon energy).

8. To support research excellence in these areas new ‘Sêr Cymru’ teams and National Research Networks aim to strengthen Wales’ research performance by targeting investment, supporting infrastructure and attracting world-class research talent. Innovation Wales also aims to focus significant investment in areas of Smart Specialisation.
9. The Grand Challenges recognise the importance of **addressing societal challenges for balanced, sustainable and inclusive economic growth.** Territorial cohesion is also sought through supporting areas of existing and emerging expertise, such as clusters. The contribution investment in R&I can make to genuine sustainable development is illustrated in the opportunities for **green growth** and the transition to a low Carbon economy. Green growth has been identified as presenting significant opportunities for future growth and jobs.

10. **Investment in R&D in West Wales and the Valleys (WW&V)** is much lower than the UK as a whole (0.96% [D.N. will be updated] of GVA in 2011 compared to 1.79%)\(^2\), and even further behind the best performing regions across the EU. Lower levels across Wales in comparison to these regions reflect fewer world-class institutions and specialisation clusters, fewer R&D intensive businesses, but also the potential for more RD&I to be carried out in Wales by those multi-national R&D intensive businesses with a Welsh presence.

11. Demonstration of research excellence and securing **competitive research funds** attracts businesses, which in turn can support the creation of specialised clusters. **Science for Wales** highlights a need to increase our share of UK Research Council funding from 3.3 per cent in 2009/10 to 5 per cent (reflecting Wales’ population share in the UK). Wales attracted just over 2% of the Framework Programme 7 (FP7) funding to the UK in 2011\(^3\), though it should be noted that a significant proportion of this was secured by institutions in East Wales, such as Cardiff University; a strength that could be more fully exploited by institutions in East Wales. **Innovation Wales** also recognises that Wales needs to play a bigger role in the wider UK and European innovation system; Wales is identified an Innovation Follower\(^4\) which is a strength in the EU context, but a challenge in relation to the best performers in the UK and across Europe.

12. **Barriers to accessing competitive funding** relate to capacity and capability of existing institutions within Wales in terms of facilities, equipment, excellence of research and researchers, and lack of previous success. Other barriers include a lack of finance and technical expertise to prepare bids, horizon scanning, and international partners / networks.

13. As competitive funds are secured and partnerships develop a key aim should be the **creation of clusters**, building on existing strengths, which bring together researcher institutions with both large and small businesses\(^5\). The demonstration of research excellence can attract business investments, which is where the transformational change in this area can be delivered. This is not a rapid process, but it is clear progress is being made in Wales with increased industrial collaborations and increasing private investment in RD&I in Wales.

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\(^2\) Gross domestic expenditure on research and development (GERD) ONS  
\(^3\) Welsh participation in EU research, innovation and lifelong learning programmes, National Assembly for Wales, European and External Affairs Committee (February 2011)  
\(^4\) Innovation Union Scoreboard 2013, Hugo Hollanders and Nordine Es-Sadki, (UNU-MERIT), for the European Commission  
\(^5\) This is a key feature of the smart specialisation approach. For example: Policy Instruments for RIS3 Clusters, Jaime del Castillo, Belen Barroeta and Jonatan Paton, 2012. Available at: http://s3platform.jrc.ec.europa.eu/links
14. **Private sector investment in research** in Wales fluctuates subject to investment programmes of a small number of businesses. Overall, private sector investment in Research in Wales has been increasing (both cash value and as a percentage of Welsh GVA). Wales does not have many research intensive companies with research centres in Wales and successful clusters across the EU often have large research intensive companies, helping to support diverse supply chains. There are signs of this changing as clusters in key sectors are being developed and will be strengthened through the National Research Networks.

15. A small number of significant investments in **R&D infrastructure** were made under the 2007-2013 ERDF programme, increasing the availability of facilities suitable for highly specialised research as well as business incubation by 10,000 square meters. This Priority will seek to increase the specialised research infrastructure only where this can clearly demonstrate that it will increase the capacity and capability to undertake world class research, encourage inward investment and develop existing and emerging capability.

16. Welsh businesses report a relatively high involvement in **innovative activities** compared to other parts of the UK. Although it is recognised that there is a need to develop a better understanding of our strengths in innovation, the promotion of innovation should help increase the productivity levels of Welsh businesses from its comparatively low base. In particular **Innovation Wales** recognises the need for flexible support to encourage a culture of innovation across all sectors to complement the targeted investments through Smart Specialisation.

17. The UK Innovation Survey reported that the overall proportion of **innovation-active businesses cooperating with universities** in the UK is only 15% although HEBCIS data indicates a well developed and effective knowledge transfer system between HE and business. **Innovation Wales** recognises that pockets of world class expertise exist in academia in areas with commercial potential, although lacking in global scale and an opportunity to build on existing best practise in the commercialisation of R&D.

18. Significant barriers to the **commercialisation of R&D** remain. Science for Wales recognises the world-class science undertaken in Wales, particularly in the Grand Challenge areas, but also found

> “frequently SMEs and individuals have considerable difficulty being able to demonstrate to potential funders the proof of concept for the idea, technique or product that they want to develop [and] it is often necessary to

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6 A number of case studies are highlighted in *An analysis of the effects of Structural Funds support for Research, Technological Development and Innovation 2000-2010* (2011)
7 For example Institute for Life Sciences 2, Centre for Nanohealth, Arts and Innovation Centre
8 For example those identified in *Science for Wales and Innovation Wales* (collectively the Welsh Smart Specialisation Strategy) as areas with existing and emerging strengths (e.g. stem cell research around Cardiff or agricultural research in Aberystwyth).
9 *UK Innovation Survey 2011* (2012), UK Department for Business, Innovation, and Skills (BIS)
10 *Innovation Wales* (2013, Welsh Government)
11 In 2011 GVA per hour worked in WW&V it was 80% of the UK average (ONS)
12 *UK Innovation Survey 2011* (2012), BIS
13 *Higher education-business and community interaction survey 2011-12* (2013), HEFCE
demonstrate experience and competence by a proof of concept study for competitive calls. “

19. The ERDF regulations require a focus on the transition to a low Carbon economy and as one of the three Grand Challenge areas identified in the Welsh Smart Specialisation strategy this offers a particular opportunity in Wales, particularly given the emerging expertise in key areas. The Welsh environmental goods and services sector was estimated at £4.1bn in 2008/09, employing well over 40,000 people, and the sector is expected to continue growing and there is some existing expertise in a range of areas highlighted in the Welsh Smart Specialisation approach. Wales benefits from significant academic expertise in developing and integrating low-Carbon technologies, for example in the Sustainable Buildings Envelope Centre in Flintshire (East Wales).

20. Renewable energy technologies (e.g. on and off shore wind, photovoltaic, biomass, etc) are already more mature and are key growth sectors (for example there are now a number of off-shore wind arrays across the Welsh coast). To realise benefits of these and other major investments in the programme area consideration needs to be given as to whether investment can be made in helping to capture new manufacturing, operation and maintenance opportunities in the programme area, for example through research and innovation to lower costs in deployment and maintenance and to demonstrate newer and more innovative technologies.

Summary of justification for Selection of Investment Priorities and identification of Specific Objectives (Information Only as part of Intervention Logic; not part of template)

<table>
<thead>
<tr>
<th>TO / IP</th>
<th>Needs</th>
<th>Growth Opportunities</th>
<th>Specific Objective (SO)</th>
</tr>
</thead>
</table>
| (1) / (1a) | • Facilities and infrastructure  
• More excellence in research  
• Greater BERD  
• Secure more competitive funding | • Specialisations in Grand Challenge areas  
• Some centres of excellence  
• Existing and emerging clusters | (1.1) To increase the success of Welsh research institutions in attracting competitive and private research funding |
| (1) / (1b) | • More businesses and sectors innovation active  
• Develop culture of innovation | • History of innovation  
• Specialisation clusters  
• Good industrial engagement by HE institutions | (1.2) To increase the level of innovation undertaken across all sectors of the Welsh economy, in particular within Welsh SMEs, leading to a growth in productivity |
| (1) / (1b) | • More successful products launched in | • Specialism and clusters opportunity for benefit | (1.3) To increase the successful translation of |

14 UK Department for Business Innovation and Skills, 2010
15 For example smart living, energy resource-efficiency, sustainable buildings, crop management, etc
<table>
<thead>
<tr>
<th></th>
<th>Wales</th>
<th>realisation in the programme area</th>
<th>research and innovation processes into commercial products, processes and services to the benefit of the programme area</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4) / (4f)</td>
<td>Same as for SO(1.1), but for low Carbon research funding</td>
<td>Same as SO(1.1), but for low Carbon research funding.</td>
<td>(1.4) To increase the success of Welsh research institutions in attracting competitive and private research funding related to low carbon research and innovation</td>
</tr>
<tr>
<td></td>
<td>To remain competitive in growing market</td>
<td>Assets like Low Carbon Research Institute and others</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low Carbon, Energy and Environment identified as research priority for Wales, with emerging specialisms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Same as for SO(1.3), but for commercialisation of low Carbon related R&amp;I</td>
<td>Same as SO(1.3), but for commercialisation of low Carbon related R&amp;I</td>
<td>(1.5) To increase the successful translation of low Carbon related research and innovation processes into commercial products, processes and services to the benefit of the programme area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Energy and Environment sector identified as growth sector</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Emerging smart specialisms in Low Carbon fields</td>
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</tr>
</tbody>
</table>

**Priority Axis 2: SME Competitiveness**

21. This Priority will promote entrepreneurship and business **start-ups** and help SMEs to improve their competitiveness through **productivity growth** and **growth in the size of businesses**. These are complementary but sometimes contradictory elements of SME competitiveness. Productivity growth is essential for competitiveness and accounts for a large proportion of the gap in average GVA per head between Wales and the UK; however this can lead to reductions in the number of employees within a business as processes improve. Growth in the size of businesses supports long-term employment, but only where the growing business is doing so sustainably and is genuinely competitive.

22. **Specific barriers and tipping points** to business growth are therefore identified and tailored support sought to address them to improve both important forms of growth: for example access to finance and business support targeted at the key stages of business growth (e.g. creation, export and expansion), with particular emphasis on the role of ICT and the digital economy in helping promote productivity growth.

23. The Partnership Agreement set out the issues relating to **access to finance for both starting and expanding businesses**, and data from the Welsh Small
Business Survey\textsuperscript{16} also suggests that micro enterprises in Wales face the biggest difficulties in gaining finance. Banks are unlikely to return to their lending levels pre credit crisis and a gap in equity finance has been evidenced\textsuperscript{17}.

24. \textit{Innovation Wales} recognises that \textbf{innovative activity} in Wales is constrained by a lack of private development finance. A culture of innovation is one of the features of high growth firms\textsuperscript{18}, indicating that targeting of innovative firms and supporting innovation through risk capital might be a useful mechanism to specifically support those SMEs.

25. The market failure and potential role for EU funding for a range of financial products (including loans, micro-finance, risk capital, etc) is being assessed through a dedicated \textbf{ex-ante assessment} and this will inform the baseline and allocations to be directed towards this provision.

26. The \textbf{business birth rate} in Wales was 34\% below that for the UK as a whole\textsuperscript{19} and one of the main barriers to the creation of new SMEs is access to business advice and guidance\textsuperscript{20}. In addition levels of entrepreneurship in Wales on average underperform those in the UK\textsuperscript{21}. Early stage entrepreneurial activity in Wales has risen through the recession, tracking the UK average. Encouragingly Wales has seen an increase in the number of early-stage younger (18-29) and women entrepreneurs compared to the UK average (GEM 2011\textsuperscript{22}), though women remain under-represented in Wales and across the UK as a whole. Start-up support schemes in Wales have demonstrated some success in removing barriers to entrepreneurship\textsuperscript{23}.

27. Low SME productivity, highlighted as an issue in Wales, will not be addressed solely through encouraging start-ups. Research recognises productivity is a key driver of economic growth\textsuperscript{24}, but that rapid and significant growth is achieved by relatively few businesses\textsuperscript{25}. For example, Global Entrepreneurship Monitor data suggest that 10\% of emerging entrepreneurs expect to create 70\% of all job creation forecast by their cohort\textsuperscript{26}. It is very difficult to identify those \textbf{growth}.

\textsuperscript{16} 2012 \textit{Small Business Survey} (2013), BMG Research for the Welsh Government
\textsuperscript{17} Gap for Wales' regions being identified as part of ex-ante assessment for Financial Instruments.
\textsuperscript{18} \textit{The vital 6 per cent.: How high-growth innovative businesses generate prosperity and jobs} (2009), NESTA
\textsuperscript{19} \textit{Statistical bulletin “Business Demography: Enterprise Births and Deaths 2011”} (29 Jan 2013), Welsh Government
\textsuperscript{20} For example: \textit{Barriers encountered during micro and small business start-up in North-West England} (2000), S L Davidson Fielden, M J, P J Makin
\textsuperscript{21} \textit{Statistical bulletin “Business Demography: enterprise births and deaths, 2010”} (19 Jan 2012), Welsh Government
\textsuperscript{22} \texttt{http://wales.gov.uk/topics/businessandeconomy/publications/121112gemukreport/?lang=en}
\textsuperscript{23} \textit{Mid Programme Evaluation of the Start Up Service for the Welsh Assembly Government} (Undated), ERS, Beaufort Research and Hywel Evans Associates.
\textsuperscript{24} For example: \textit{The ONS Productivity Handbook, Chapter 3: Productivity Theory and Drivers}
\textsuperscript{25} For example around 2-4\% of high-growth businesses are estimated to be responsible for the majority of employment growth in the UK private sector. \textit{BERR economic paper No. 3 “High growth firms in the UK: Lessons from an analysis of comparative UK performance”} (November 2008), UK Department for Business Enterprise and Regulatory Reform (now BIS)
businesses, especially when they are first formed; however there is evidence\textsuperscript{27} that the growth intentions of businesses have a large effect on whether they will indeed grow. Generally, Wales has a lack of growing companies, including large companies\textsuperscript{28}. High growth businesses, while small in number and notoriously difficult to identify, remain key to driving productivity across the board and in increasing jobs. The UK compares well internationally in its percentage of high growth businesses, 5.8% against US (c. 5%) and Italy (3%) and there are therefore clearly significant potential benefits in \textbf{targeting growth businesses}. Wales has some previous success with high growth firms, having the highest proportion of high growth firms of any region in the UK between 2002 and 2005 (though this position has subsequently fallen)\textsuperscript{29}.

28. Research\textsuperscript{30} confirms that SMEs have a number of concerns relating to the seeking of \textbf{advice and information} which point towards some of the market failures in this area. The concerns particularly relate to the expense and time involved with taking up formal business assistance, not being able to trust external advisors, or concerns about whether they would understand the business, and confidence in being able to access appropriate assistance emerged.

29. \textbf{New market entry} is one of the key points and barriers to business growth\textsuperscript{31}. Export figures in Wales below UK average and dominated by a small number of large companies\textsuperscript{32}. The Welsh Government has recognised that significant opportunities also lie within supply chains, from procurement opportunities and in links with anchor companies\textsuperscript{33}. This in turn can help build capacity for access to national and international supply chains and procurement opportunities. Since 1999 there has been a 106% increase in Welsh exports (UK average 71%)\textsuperscript{34}. The majority of growth is demonstrated in markets outside of the EU reflecting both the weakness of the EU economy and the potential for growth in emerging markets. This suggests the internationalisation of Welsh SMEs can be encouraged through both domestic and international supply chain development, including seeking new markets.

30. Domestic markets are also important sources of growth opportunities for SMEs, in particular through \textbf{procurement opportunities}. For example the public sector across the UK spends £150 billion a year and the Welsh public sector £4.3 billion a year. Businesses successful in domestic procurement should find fewer capacity barriers to export markets and international procurement opportunities (e.g. through OJEU).

\textsuperscript{27} ERC \textit{White paper: Growth and growth intentions} (2013), Levie and Autio  
\textsuperscript{28} Size \textit{Analysis of Welsh Businesses}, 2012, Welsh Government  
\textsuperscript{29} \textit{The vital 6 per cent: How high-growth innovative businesses generate prosperity and jobs} (2009), NESTA  
\textsuperscript{30} \textit{Research to understand the barriers to take up and use of business support} (2011), Centre for Enterprise and Economic Development Research for BIS  
\textsuperscript{31} \textit{A review of the literature addressing the role of external knowledge and expertise at key stages of business growth and development} (2005), Bessant, J., Phelps, B., & Adams, R. Cranfield School of Management  
\textsuperscript{32} \textit{Regional Trade statistics} (8 June 2012), Welsh Government  
\textsuperscript{33} \textit{Economic Renewal: a new direction} (July 2010), Welsh Government.  
\textsuperscript{34} \textit{Regional Trade statistics} (8 June 2012), Welsh Government
31. The importance of **ICT and the digital economy** to productivity growth set out in the Partnership Agreement needs to be reflected in the support offered to SMEs. An estimated 83,000 SMEs in Wales don’t have a website and just 14% of the UK’s SMEs sell their products online. There is a need to ensure that SMEs take advantage of significant ICT infrastructure and capacity investments; and in doing so being aware that e-crime and the fear of e-crime represents a significant barrier to business adoption of ICT. Estimates for the cost of e-crime suggest it could cost the UK economy around £27 billion every year.

32. There are around 3,000 organisations carrying out **social enterprise** activity in Wales with a combined turnover of £2.2 billion (07/08 estimate). Welsh social enterprises operate in most industries across Wales, though the majority are involved in training and education, arts and Welsh language, business support, health and social care, and sports; the same research noted social enterprises in Wales seek specialist advice and support to become better businesses.

33. Energy consumption in Wales is nearly 30% higher than the average across Great Britain, largely accounted for by industry and reflecting a larger proportion of more energy intensive businesses such as manufacturing in Wales. In addition to being able to contribute to energy efficiency targets (complementing initiatives under Priority Axis 4) there are significant benefits for individual businesses. This industrial mix, coupled with increasing energy costs, is a barrier to the competitiveness of Welsh businesses. While the most energy intensive of businesses have strong incentives to pursue energy efficiency goals, supported through capital investment, medium and lower energy intensive businesses do not. A range of barriers affect the uptake of **energy and resource efficiency** measures in businesses, particularly SMEs, including it being a low priority, lacking expertise, lacking capital, and no compelling case given perceived long payback periods. Given that around 55% of delivered energy use in the public and commercial sector is SMEs there is potentially a significant opportunity being lost because of a lack of incentive for those businesses, not addressed through loan schemes with lengthy payback periods.

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36 For example: Next Generation Broadband (www.superfast-cymru.com) or Super Connected Cities (http://www.cardiff.gov.uk/content.asp?nav=2%2C2867%2C6556%2C6557)
37 The Cost of Cyber Crime (14 February 2011), Detica and Cabinet Office
38 Tailored research informing Social Enterprise Action Plan (2009), Welsh Government. No regular or reliable data at Wales level given different legal structures, different definitions and lack of visibility.
39 Mapping social enterprise activity in Wales (October 2009), Welsh Government. Available at: http://wales.gov.uk/topics/housingandcommunity/regeneration/publications/110803socialmapping/?lang=en
40 Average final energy consumption per thousand population in Great Britain by region and consuming sector - Sub-national total final energy consumption statistics (2011 data), DECC
41 Exploring the design of policies to increase efficiency of electricity use within the industrial and commercial sectors (November 2012), Carbon Trust & SPA Future Thinking for DECC
42 Engaging SMEs to improve their Energy Efficiency, A Market Appraisal (2009), DECC
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<th>Specific Objective (SO)</th>
</tr>
</thead>
</table>
| (3) / (3a) | • Lack of availability of private finance / lack of bank lending  
  • Additional barriers for micro-finance | • History of nurturing high growth SMEs in Wales  
  • Emerging clusters key sectors and specialisms | (2.1) To increase the amount of finance available to SMEs for both business start-up and for business expansion |
|         | • Barriers remain to new start-ups                                  | • Increasing levels of entrepreneurhip, particularly women  
  • Success of previous investments | (2.2) To increase the number of SME start-ups through the provision of information, advice and guidance |
| (3) / (3d) | • Productivity gap main reason for difference in SME competitiveness  
  • Low level of e-commerce and take up of ICT by businesses affecting both productivity and growth  
  • Barriers remain at each stage of business growth (or each tipping point)  
  • Tailored advice needed on some issues specific to social enterprises (e.g. governance) to reflect differences between them and conventional SMEs | • Successful targeting could drive employment growth (if coupled with productivity growth)  
  • Existing clusters and specialisms supported through increasingly strong innovation system to support growth  
  • Major investments in ICT infrastructure underway  
  • Social Enterprises are a growth sector in Wales, which has a strong tradition of social enterprise and financial providers active in this area  
  • Range of mainstream business support with potential to be more social enterprise friendly | (2.3) To increase SME productivity and promote business growth through the provision of advice and guidance |
| (1) / (1b) | • Access to finance barriers even more pronounced for innovation and innovative SMEs | • Productivity and business growth more likely to come from innovative firms and from the products and process they develop.  
  • Smart specialisation highlights specific growth opportunities | (2.4) To address market failures in the availability of finance, in particular risk capital, for Welsh SMEs to undertake innovation, commercialise R&D and unlock productivity improvements |
Priority Axis 3: Renewable Energy and Energy Efficiency

34. Green Growth and the transition to a low-Carbon economy represents a key opportunity to support both jobs and business across Wales; particularly given an abundance of natural resources and assets, a good research base, strong endogenous technical expertise and key energy infrastructure (including substantial National Grid transmission capacity\(^{43}\)) in place. *Energy Wales* sets out the Welsh strategy for coordinating action, and existing capability will be strengthened through clusters within three Enterprise Zones. The Research and Innovation Priority Axis sets out how related support will be available for research and innovation in the low carbon field.

35. Wales’ significant natural resources\(^{44}\) and assets indicate major growth potential in renewable energy generation in the long term. The opportunities for the more developed sectors are mostly around Research and Innovation to further develop technologies (e.g. wind and solar), perhaps seeking to attract finance from some of the already well established market leaders outside of the programme area.

36. Wales has key assets important to the emerging marine energy sector where there is still an opportunity to capture greater market share and realise more benefits within the programme area, attracting investment into the programme area. Wales also has key infrastructure assets providing advantages over other territories investing in this area such as: deep ports; well connected transmission and distribution grids; research expertise in businesses and universities; and employers with skilled workforces that can take advantage of supply chain opportunities.

37. The UK Energy and Climate Change Select Committee\(^ {45}\) reported that the marine renewables industry (tidal and wave) could be worth £3.7 billion to the UK by 2020 and RenewableUK suggests the marine energy industry (tidal and wave) is forecast to be worth £6.1 billion to the UK economy by 2035, creating nearly 20,000 jobs (not including export opportunities)\(^ {46}\). Given Wales’ comparative advantages there is the potential to become a significant market player in this area\(^ {47}\), albeit in a nascent market. Some private investment in marine energy in Wales is emerging\(^ {48}\), but much more investment is needed to demonstrate commercial viability of emerging technology solutions, in particular through larger scale tests if we are to see benefits realisation in the programme area (e.g. R&D, manufacture, operation and maintenance).

\(^{43}\) *Marine Energy Infrastructure Study : Stage A - Industry Consultation and Concept Design* (July 2012), Halcrow

\(^{44}\) Significant wind resources (on- and off-shore); significant wave and tidal energy potential (*Marine Renewable Energy Strategic Framework*, 2011); one of the best solar resources in the UK; and scope for more biomass and hydro


\(^{46}\) *Wave and Tidal Energy in the UK 2013: Conquering Challenges, Generating Growth* (27 February 2013), RenewableUK

\(^{47}\) Small clusters are developing in the South West and in North Wales, but creating new and attracting other businesses to Wales will be necessary to capture market share.

\(^{48}\) For example Marine Current Turbines off the coast of Anglesey and Tidal Energy Ltd off the coast of Pembrokeshire.
38. **Tidal and wave** technology is only just reaching testing phases, but getting closer to commercialisation, indicating a wider potential need for investment (e.g. infrastructure, R&D&I, demonstration of working models to make schemes more attractive to potential investors\(^{49}\)). Emerging clusters in North Wales and South West Wales offer specific opportunities to develop the marine energy sector in a targeted way. To retain and develop existing businesses, as well as attract new businesses, we need to ensure these clusters are not hampered through a lack of viable and consented test sites, connectivity and capacity to demonstrate technology.

39. As at 31 December 2011 the installed capacity of sites generating electricity from renewable sources in Wales was 929.4 MW\(^{50}\). **Small scale energy schemes** can make a contribution to reducing carbon emissions and stimulating local economic growth (for example a cooperative community model will allow money to be reinvested in other community schemes\(^{51}\)). Access to finance is good (albeit fragmented) for viable small-scale schemes, but there is a need to de-risk the early stage development of proposals before they can attract finance. The ex-ante assessment to inform potential Financial Instruments in Wales for 2014-2020\(^{52}\) and findings to date from Ynni’r Fro (community energy scheme funded through ERDF) suggest that large capital finance is not the main barrier to local and community schemes; indeed there is a relatively crowded market for finance for this activity. There remains a need, however, for advice and guidance for groups to address those barriers prior to reaching consent (and therefore having a financially viable proposition).

40. A number of mature technologies are available to support small scale and community scale low Carbon initiatives (e.g. wind, solar PV, hydro) but the adoption of such technology is expensive and not as widespread as it could be due to uncertainty caused by early stage and planning activity raising questions over commercial viability and benefits. There is a need to demonstrate viability on small scale / community scale and to support measures to speed up the process to help lever additional private resource into these models.

41. There is a need to address the poor energy efficiency of much of the housing stock in Wales. Wales’ housing stock has poor energy efficiency in comparison with the rest of Europe\(^{53}\), and many households in Wales face issues of fuel

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\(^{49}\) Marine Energy Technology Innovation Needs Assessment (TINA) (August 2012), Low Carbon Innovation Co-ordination Group (LCICG). Available at: [http://www.lowcarboninnovation.co.uk/working_together/technology_focus_areas/marine/](http://www.lowcarboninnovation.co.uk/working_together/technology_focus_areas/marine/)

\(^{50}\) Renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2012 (September 2013), DECC

\(^{51}\) For example some case studies are set out in: Co-operative renewable energy in the UK: a guide to this growing sector (2012), Rebecca Willis and Jenny Willis, The Cooperative Group

\(^{52}\) Wales ex-ante evaluation of European Programmes 2014-2020 – Financial Instruments, Stage 1 report (2013), Regeneris and OldBell3

\(^{53}\) The average Standard Assessment Procedure (SAP) rating of energy efficiency for Welsh homes is 50 (2008 to be updated in August 2013).
poverty. The sheer scale of the challenge dwarfs the available funding and there will be a need to target resources while not missing opportunities for economies of scale or flexible support. There is a need for intervention in the rented sector in particular where the incentive for owners to invest in energy efficiency measures (for example through the Green Deal) are less clear as they don’t benefit from reduced energy bills directly. Investing in energy efficiency will not only enable cost-effective reductions in greenhouse gas emissions, but will create business and employment opportunities for local labour.

42. Wales has developed a comprehensive energy efficiency supply chain to take advantage of the opportunities to date offered by the promotion of energy efficiency in housing (for example over 80% of the businesses that delivered phase 1 of Arbed operated primarily, or solely, in Wales). These businesses should be in a position to help deliver wider schemes, such as the Green Deal across the UK and significant opportunities to access Energy Company Obligation (ECO) funding. There are therefore significant opportunities for the Welsh supply chain that could be maximised through complementary investment in the supply side to take advantage of the opportunities in the design, manufacture, distribution, installation and maintenance of domestic energy efficiency measures and renewable energy technologies. Support might include accreditation for SMEs or encouraging collaboration to build consortiums to access procurement opportunities.

**Summary of justification for Selection of Investment Priorities and identification of Specific Objectives (Information Only as part of Intervention Logic; not part of template)**

<table>
<thead>
<tr>
<th>TO / IP</th>
<th>Needs</th>
<th>Growth Opportunities</th>
<th>Specific Objective (SO)</th>
</tr>
</thead>
</table>
| (4) / (4a) | RTD&I necessary for commercial viability of marine energy sector  
Lack of private investment as nascent sector  
Need for accessible test sites | Significant marine resources  
Existing capability, skills, and network capacity  
Good location of existing ports  
Enterprise zones | (3.1) To increase the number of renewable energy devices being tested in Welsh waters and off the Welsh coast, including multi-device array deployments, thereby establishing Wales as a centre for marine energy production |
| | Lack of capacity of community groups  
Lack of finance for early stage development of small scale or community | Small scale energy schemes contribute to reducing carbon emissions and can stimulate local economic growth. | (3.2) To increase the number of small scale renewable energy schemes established |

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54 Welsh Government ambition to eradicate fuel poverty by 2018, but in 2010 over 23% (332,000) of households in Wales face issues of fuel poverty: *Fuel Poverty Evidence Plan* (March 2012), Welsh Government
<table>
<thead>
<tr>
<th>renewable energy project proposals before they can attract finance.</th>
<th>• A range of financial support available once schemes developed</th>
</tr>
</thead>
</table>
| • Poor energy efficiency of Welsh housing stock  
• Lack of incentive for private rented sector to invest  
• Issues of fuel poverty  
• Some capacity issues in supply chain to access larger contracts | • Growing supply chain  
• Potential for use of new technology  
• Growth sector in Wales and UK.  
• ECO and Green Deal opportunities across UK |

### Priority Axis 4: Connectivity and Sustainable Urban Development

43. In its Programme for Government the Welsh Government acknowledges that its interventions can only impact significantly on the Welsh economy in the longer-term. Evidence shows that investment in connectivity and enabling infrastructure is one of the two most important ‘levers’ (in addition to investment in skills development) through which the Welsh Government can help to achieve transformational economic change. A ‘Wales Infrastructure Investment Plan’ (WIIP) has been created to prioritise, scope, and coordinate delivery of major infrastructure investments over a 10 year period and will help identify areas in which there are investment opportunities.

44. Investments in all other Priority Axis and through the other ESI programmes need to be complemented with significant investment in the commercial attractiveness and accessibility of key centres in the programme area to businesses and workers. Infrastructure helps people to access work, increases the forces of competition, promotes greater efficiency, and increases the likelihood of co-location and clustering. Without this investment businesses supported to grow and investments in skills and employability of the workforce in West Wales and the Valleys will simply migrate out of the programme areas and closer to the key urban centres of Cardiff or in England. Likewise, improving transport infrastructure can lead to greater competition for local businesses. We should look to ensure connectivity is competitive and appropriate to both retain existing businesses and skills and attract new businesses and skilled workers to the region. Measures tackling poverty through improving employability need to be supported through sustainable employment growth, and that is only possible if the right environment exists to sustain businesses.

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55. *Economic Renewal: a new direction* (2010), Welsh Government. Other levers include targeted business support, encouraging innovation, and making Wales a more attractive place to do business.  
56. *Going for Growth*, OECD, and *Understanding productivity variations between Wales and the rest of the UK*, Welsh Assembly Government
45. **Peripherality** impacts significantly on economic opportunity across Wales. This is particularly so in West Wales and in rural areas of Wales. Network and transport connectivity is highlighted in a range of analyses as critical to the competitiveness of the UK economy; this is even more of the case for WW&V as a peripheral region lacking from major agglomeration economies. The Wales Transport Strategy sets out that enhancing international connectivity is one of the five key areas where progress is needed. The European Commission’s Communication on a "Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system" also highlighted transport infrastructure as essential in order to guarantee the operation of the single market, and must promote competitiveness and sustainable growth.

46. The TEN-T routes are the key corridors and international gateways for the **south Wales** economy, which includes Cardiff airport and the ports of Newport, Cardiff, Port Talbot, Swansea, Pembroke, Milford Haven and Fishguard. The problems associated with the peripherality of WW&V remain, meaning those more peripheral areas are less likely to attract major investment in transport infrastructure as they are trapped in a cycle of underinvestment (e.g. need improved links to attract businesses and retain skilled workers, but are lower priority for investment because of a lack of business growth). In the **north of Wales** the TENT-T route links Ireland with the rest of Europe. It provides the main artery for North Wales and connectivity to major urban centres in England. Examples of bottlenecks and ageing infrastructure include the Britannia bridge as the only single carriageway section of the Trans European Road Network route E22. Further needs may emerge as part of the significant development associated with the Anglesey Energy Island programme.

47. The **TEN-T rail network** in south Wales will benefit from significant investment as part of an announced electrification from London to Swansea (by 2018) and then the Valleys lines (by 2020). Further investments may be required in order to extract the maximum economic benefit for the programme area from this investment and to encourage modal shifts.

48. Towns and cities face ever growing challenges to improve urban mobility and labour mobility through more efficient performance of transport systems, to reduce the negative impacts of transport activities on the climate, the environment and citizens' health, and to render urban and labour mobility more sustainable.

49. The programme area suffers from poor connectivity and bottlenecks related to access to employment opportunities, particularly between the south Wales valleys and Cardiff. There is also a need for specific investments resolve local problems that prevent good accessibility for economically important business clusters including the Enterprise Zones sites.

50. Lower skilled workers have lower levels of access to private transport, less spatial mobility, and therefore fewer opportunities to access jobs in locations less

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57 Reflecting remoteness from major markets, specialist suppliers and services, larger pools of skilled labour or contact with other businesses and information sources

58 COM(2011) 144

59 National Travel Survey (2011), DfT. Uses 2009 data.
accessible by public transport (and lower skilled jobs are increasingly dispersing out of urban centres). Lower skilled workers therefore need well functioning public transport to access employment opportunities.

51. Commuting flows are particularly pronounced around the two City regions in Wales (Cardiff / Newport and Swansea) with significant flows between Cardiff, Newport and the Valleys regions. Significant improvements in sustainable transport and better connectivity would enable the regions to properly exploit the potential for agglomeration effects noted in other city regions across the UK and Europe. Expected continuing increases in commuting can only be achieved sustainably through investing in the effectiveness, viability and affordability of genuine alternatives to private travel. There are also opportunities to increase the volume of freight travelling by more sustainable means (e.g. rail) at the same time as improving labour market mobility.

52. Respondents to the 2011 Wales ESF Leavers Survey who were out of work prior to their participation cited a perceived lack of appropriate jobs in the area where they lived (65%), and transport difficulties / barriers associated with accessing appropriate work (23%) amongst the key barriers to accessing work.

53. Transport infrastructure and services provide an important means of enabling people in rural Wales to access key services and facilities including hospitals, education, training and employment. The quality of a region’s infrastructure has an important role in enabling sustainable economic growth. Investing in good quality infrastructure can provide an environment which is attractive to businesses and which facilitates access to employment opportunities and services as providing a valuable boost in terms of construction jobs. Peripherality has major impacts in one form or another on levels of productivity across Wales, and in West Wales in particular. It is acknowledged that it is not a coincidence that most convergence regions in the EU15 are located on the periphery of the EU or away from the centres of economic activity.

54. In providing the right conditions for economic growth infrastructure investments are the foundations for private sector investments and essential preconditions to support economic cohesion. Social cohesion outcomes can be achieved in the targeting of investments and the appropriate design of schemes, in particular through coordination and planning for specific territorial investments. This approach is vital to ensuring the potential benefits for territorial cohesion are captured. Specific assessments on the territorial impact and opportunity will be necessary for infrastructure investments given their importance for regional economies.

60 Transport and Social Inclusion. Have we made the connections in our cities? (2010), PTEG
61 Moving on up, moving on out? Overcoming the jobs-skills mismatch (July 2011), Lena Tochtermann & Naomi Clayton, Centre for Cities
63 ESF Leavers Survey 2011 (2013), WISERD (Cardiff University) et al
64 Productivity in Wales: Analysis of the impacts of peripherality on spatial patterns of productivity-Report to the Economic research advisory panel, Welsh Assembly Government
55. Wales had the lowest availability of cable broadband services (2012) and the second-lowest availability of fibre broadband (2013) among the UK nations. Access to Next Generation Broadband (NGB) and availability of superfast broadband (actual downstream speed of 30Mbit/s or higher) is lowest in Wales of all UK regions (48% compared to UK average of 73%; although this is up from 37% a year earlier).

56. There is a need to deliver broadband infill to the 4% of Welsh premises which will not benefit from the roll-out of Next Generation Broadband services and the 5% which will not benefit from the roll-out of 4G. Investment in ICT infrastructure has the potential to improve the connectivity of the programme area and to underpin innovation, and the wide-scale application, commercialisation and exploitation of digital technologies by Welsh businesses, and particularly the ICT and Creative Industries sectors. Opportunities will arise to address legacy issues: for example Wales has the second lowest proportion of premises with outdoor coverage from 2G mobile networks, third lowest for 3G, and only 56.9% of premises in Wales (lowest in UK) with similar coverage from all four 3G networks. This is despite a greater reliance being placed on mobile devices and networks as sole telephone (23% compared to UK average of 15%) and sole device to access the internet (9% of consumers, compared to UK average of 4%).

57. As well seeking to prevent disparities there are significant opportunities to take a lead in seeking to attract and retain key businesses requiring Enterprise Class connectivity solutions. Larger businesses, businesses requiring upload speeds which match their download speeds (so called Symmetric services), and enterprises who need to connect securely from one site to another will need more tailored ICT connectivity and there is an opportunity to capture and retain these businesses in strategic sites.

58. Welsh labour market statistics are examined in detail in the socioeconomic analysis and as part of the ESF programmes more generally, with Wales lagging the UK, and WW&V lagging Wales. There are significant variances in employment rates and the reasons for those variances in rates differ across Local Authorities in Wales. In order to support employment friendly growth across Wales a range of different factors need to come together. Some of these are addressed in complementary parts of the ESI programmes for Wales (e.g. transport connectivity, skills, employability, etc) and others more generally by Government (e.g. education, public services, etc).

59. The Welsh Index of Multiple Deprivation highlights those local authorities performing worst in the employment domain are Merthyr Tydfil (33.3% of its Low Super-Output Areas in the most deprived 10% in Wales) and Blaenau Gwent (31.9%), though again pockets of deprivation exist in the wealthiest of Local Authority areas. More generally lower skilled jobs are moving out of cities and higher skilled jobs are becoming more concentrated in urban areas. These patterns need to be better captured and exploited in the design of integrated

66 Refers to premises by postcode: Communications Market Report: Wales (August 2013), OfCom, p67
support for specific geographical regions. A study that assessed the impact of area-based regeneration policies found that accessible and meaningful levels of funding are an essential component of regeneration. The level of funding must enable physical renewal as well as community engagement\textsuperscript{68}, and experience has shown the driver for these regeneration outcomes is key investments in infrastructure in places (e.g. sites and premises, developing a tourism asset, improving access, a centre of excellence).

60. A key lesson learned from the New Deal for Communities (‘NDC’) Programme, an area-based initiative in England is that regeneration agencies need flexibility to set targets which meet local needs and circumstances\textsuperscript{69}. This is reflected in Vibrant and Viable Places, the Welsh Government regeneration framework which seeks to encourage a greater prioritisation on a limited number of growth opportunities driven by analysis rather than central targets. This prioritisation is also a central theme for these programmes and infrastructure-led schemes will be sought from partners that offer the greatest opportunity for employment growth across an entire region whilst incorporating all elements of sustainable development (economic, environmental and social outcomes).

Summary of justification for Selection of Investment Priorities and identification of Specific Objectives (Information Only as part of Intervention Logic; not part of template)

<table>
<thead>
<tr>
<th>TO / IP</th>
<th>Needs</th>
<th>Growth Opportunities</th>
<th>Specific Objective (SO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(7) / (7a)</td>
<td>• Peripheral areas not priority for core Government funding, leading to cycle of underinvestment and lost opportunities for growth</td>
<td>• Major investments announced in M4 and Electrification addressing key bottlenecks • City Regions focus could improve agglomeration • Focus on Enterprise Zones could create growth opportunities if accessible</td>
<td>(4.1) To address issues of peripherality through reducing travel times, improving connectivity to employment and markets, and encouraging modal shifts</td>
</tr>
<tr>
<td>(7) / (7b)</td>
<td>• Geography of programme areas can mean complex public transport routes • Lack of accessibility for those dependant on public transport and to key strategic</td>
<td>• Focus on City Regions will consider improving urban mobility beyond the city centres • Valleys electrification by 2020</td>
<td>(4.2) To tackle specific bottlenecks and unlocking economic opportunities for business and reducing travel to work times as a means to increase employment.</td>
</tr>
</tbody>
</table>


\textsuperscript{69} The New Deal for Communities Programme: Achieving a Neighbourhood Focus for Regeneration (2010), G. Fordham, Department for Communities and Local Government. Available at: http://www.communities.gov.uk/publications/communities/achievinganeighbourhood
<table>
<thead>
<tr>
<th>sites</th>
<th></th>
<th>sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) / (2a)</td>
<td>• Geography means still coverage issues and not spots • Still expect that 4% of Welsh premises will not to be benefit from the roll-out of Next Generation Broadband • Lack of multiple provider coverage</td>
<td>• Large investment in Next Generation Broadband • Strategic planning for key strategic sites (e.g. enterprise zones) • 4G rollout potential opportunity to address legacy issues</td>
</tr>
<tr>
<td>(8) / (8aa)</td>
<td>• Range of employment challenges across the programme area, including areas of deprivation and decline • Need for more effective and coordinated planning of place-based development</td>
<td>• Improvements in partnership working and collaboration should lead to greater impact • Investments made under ESF to tackle poverty can be complemented by supporting employment growth • Number of growth opportunities across Wales (e.g. tourism, strategic sites, industrial)</td>
</tr>
</tbody>
</table>
Table 1: A synthetic overview of the justification for the selection of thematic objectives and investment priorities

<table>
<thead>
<tr>
<th>Selected thematic objective</th>
<th>Selected investment Priority</th>
<th>Justification for selection</th>
</tr>
</thead>
</table>
| (1) Strengthening research, technological development and innovation | (1a) enhancing research and innovation infrastructure (R&I) and capacities to develop R&I excellence and promoting centres of competence, in particular those of European interest | • Commission position paper (CPP) highlights stagnation in UK R&I investment undermining competitiveness.  
• Long way off EU2020 target and slow progress highlighted in NRP  
• Priority areas identified in Smart Specialisation Strategy as areas of opportunity  
• Areas of existing and emerging international excellence to build on |
| (1b) promoting business investment in innovation and research, and developing links and synergies between enterprises, R&D centres and higher education, in particular product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through Smart Specialisation and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in Key Enabling Technologies and diffusion of general purpose technologies | • Commission position paper (CPP) highlights potential to create an innovation-friendly business environment, matching R&I business demand with supply  
• No target for EU2020 but Innovation Union sets out wider ranging objectives which remain issues in Wales  
• Wales is innovation follower and lack of innovation culture - need for greater levels of innovation across the economy  
• Need for greater levels of commercialisation of research through supporting emerging clusters and Smart Specialisations |
| (2) Enhancing access to and use and quality of ICT | (2a) extending broadband deployment and the roll-out of high-speed networks and supporting the adoption of emerging technologies and | • 4% of Welsh premises will not benefit from broadband rollout.  
• Providing super-fast connectivity solutions to key businesses across Wales can improve competitiveness.  
• Major investments expected in 4G and mobile infrastructure provide opportunities to |
| (3) Enhancing the competitiveness of SMEs | (3a) promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators | • CPP highlights importance of increasing SME competitiveness in the UK (e.g., promoting entrepreneurship, particularly in export-related sectors, and funding financial instruments and business advisory services)  
• UK CSRs highlight a need to improve the availability of bank and non-bank financing to SMEs  
• UK NRP highlights work already underway and recognises same issues and opportunities  
• Lower levels of births, survivals, growth SMEs and access to finance in programme area compared to UK |
| (3d) supporting the capacity of SMEs to engage in growth in regional, national and international markets, and in innovation processes | • CPP highlights importance of increasing SME competitiveness in the UK (particularly support in export-related sectors)  
• UK NRP highlights work already underway and recognises same issues and opportunities  
• Lower levels of births, survivals, growth SMEs and access to finance in programme area compared to UK  
• Improvements in exports but still significant barriers to growth |
| (4) Supporting the shift to a low-Carbon economy in all sectors | (4a) promoting the production and distribution of energy derived from renewable sources | • EU2020 target and NRP indicate long way away from targets for renewable energy generation at EU, UK and Wales levels  
• CPP suggests funds should support an increase in the use of all types of renewable energy looking especially at the potential of innovative technologies  
• Significant resources and assets in Wales to take advantage of  
• Size of investment needed suggests focus on encouraging private investment |
| | (4c) supporting energy efficiency, smart energy management and renewable energy use in public infrastructures, including in public buildings, and in the housing sector | • EU2020 target and NRP indicate more progress needed to reverse recent decline in energy efficiency targets.  
• CPP suggests funds should support an increase in the use of all types of renewable energy looking especially at the potential of innovative technologies, and should promote energy efficiency, particularly in buildings  
• NRP identifies specific issues with energy efficiency of Welsh housing stock  
• Fuel poverty also major issue across programme area |
| | (4f) promoting research in, innovation in, and | • Commission position paper (CPP) highlights stagnation in UK R&I investment |
### (7) Promoting sustainable transport and removing bottlenecks in key network infrastructures

<table>
<thead>
<tr>
<th>(7a) supporting a multimodal Single European Transport Area by investing in the Trans-European Transport Network (TEN-T) network</th>
<th>(7b) enhancing regional mobility through connecting secondary and tertiary nodes to TEN-T infrastructure, including multimodal nodes</th>
</tr>
</thead>
</table>
| adoption of, low-carbon technologies | undermining competitiveness.  
- Long way off EU2020 target for R&I and slow progress highlighted in NRP  
- Key to increasing private investment in low-Carbon technologies (only way to address huge gaps in related targets) will be proof-of-concept and demonstration  
- Proof-of-concept and demonstrating capacity in programme area for design and manufacture essential to capture benefits in programme area |
| UK CSRs suggest that the UK invest to improve the capacity and quality of its network infrastructure (including transport).  
- Issues of peripherality and historic lack of investment.  
- Specific bottlenecks in East West corridors in North Wales and South Wales  
- Opportunities to increase accessibility and agglomeration effects through investments linking City Regions to each other and centres in England  
- Opportunities to add value to major planned investments in TEN-T routes in South Wales |

### (8) promoting employment and supporting labour mobility

| 8 (a a) supporting employment friendly growth through the development of endogenous potential as part of a territorial strategy for specific areas, including the conversion of declining industrial regions and enhancement of accessibility to and development of specific natural and cultural resources | CSR suggests a need to step up measures to facilitate labour market integration - territorial development of places key to this  
- Some of the largest regional disparities (differences between economic and labour market indicators) in the EU evident between parts of Wales and London  
- Regional strategies in development to identify territorial priorities  
- Welsh Government investing £30 million a year on targeted territorial development |
|---|---|
1.2 * Justification of the financial allocation

Background

61. As set out in Section 2 (Priority Axes) priorities will be constructed in some cases bringing together Investment Priorities from more than one Thematic Objective. The rationale for doing so is therefore set out in that section. Financial allocations will be agreed at Priority Axis level. The justification for financial allocations set out in this section therefore seek to reflect both the construction of the Priority Axes set out in Section 2, as well as the Thematic Objectives as set out in the regulations.

Priority Axis 1: Research and Innovation

62. Allocations for this Priority Axis equate to approximately XX% of all ERDF. Separated by Thematic Objective this equates to:

- **Thematic Objective 1: Strengthening research, technological development and innovation.** Approximately XX% of the Priority Axis

- **Thematic Objective 4: Supporting the shift to a low-Carbon economy in all sectors.** Approximately XX% of the Priority Axis

63. Overall this represents a proportional increase from the 2007-2013 programme, and a significant increase for related activity supporting the transition to a low carbon economy. Justification for this allocation is based on:

- Distance from R&D EU2020 target suggests continuing capacity and capability issues, highlighted by analysis of lower access to competitive funds by Welsh organisations and a lack of large research intensive organisations.

- Need to build on a number of successes in 2007-2013, particularly around focusing on areas of excellence and specialisation for research capacity and taking advantage of a renewed emphasis in Wales (e.g. Science for Wales, *Innovation Wales*, £50m investment in National Research Networks and Sêr Cymru Teams, and new post of Chief Scientific Officer).

- *Innovation Wales* highlights significant challenges around supporting a culture of innovation, requiring a mixed investment approach.

- Seeking to exceed minimum earmarking requirements for low carbon activity and send a clear message to the sector that there will be strong support for the transition to a low Carbon economy and a focus for support on de-risking investments rather than seeking to directly address targets alone.

Priority Axis 2: SME Competitiveness
64. Allocations for this Priority Axis equate to approximately XX% of all ERDF. Separated by Thematic Objective this equates to:

- **Thematic Objective 3: Enhancing the competitiveness of SMEs.** Approximately XX% of the Priority Axis.

- **Thematic Objective 1: Strengthening research, technological development and innovation.** Approximately XX% of the Priority Axis.

65. The allocation to this Priority Axis represents a broadly similar allocation proportion to the 2007-2013 programme and is based on:

- SMEs representing a key segment of the Welsh economy, but their lack of competitiveness (particularly lower levels of productivity) means not as many are being created, growing, operating internationally or taking part in the digital economy as across the UK.

- Access to finance has not improved significantly and there remain a number of market failures which can be addressed directly. This includes provision of finance for RD&I related activity.

**Priority Axis 3: Renewable Energy and Energy Efficiency**

66. Allocations for this Priority Axis equate to approximately XX% of all ERDF. The Priority Axis will be delivered by a single Thematic Objective: **Thematic Objective 4: Supporting the shift to a low-Carbon economy in all sectors.**

67. This represents a significant increase in comparison to allocations for similar activity under the 2007-2013 programme and exceeds the thematic concentration requirements of XX% total ERDF. It should also be noted that activity under this Thematic Objective in Priority Axis 1 will also contribute to this earmarking target. The rationale is based on:

- Distances from EU2020 targets on renewable energy and energy efficiency mean significant private sector investment is required to make any genuine impact, in particular relating to objectives for marine energy. Significant public investment may be required to attract that private investment.

- Seeking to exceed minimum earmarking requirements for low carbon activity and send a clear message to the sector that there will be strong support for the transition to a low Carbon economy and a focus for support on de-risking investments rather than seeking to directly address targets alone.

- Demand and need for energy efficiency measures outstrips available resource, though a firm commitment from the Welsh Government to continue supporting investment in this area (available match funding).
Priority Axis 4: Increasing Commercial Attractiveness of Places

68. Allocations for this Priority Axis equate to approximately XX% of all ERDF. Separated by Thematic Objective this equates to:

- **Thematic Objective 7**: Promoting sustainable transport and removing bottlenecks in key network infrastructures. Approximately XX% of the Priority Axis.

- **Thematic Objective 2**: Enhancing access to and use and quality of ICT. Approximately XX% of the Priority Axis.

- **Thematic Objective 8**: promoting employment and supporting labour mobility. Approximately XX% of the Priority Axis.

69. This allocation represents a significant fall in comparison to allocations under the 2007-2013 programme. Investments under TO2 will contribute to thematic concentration targets, so the total allocations across the programme contributing to thematic concentration will be well within legislative requirements (XX% including Technical Assistance compared to maximum of XX%).

70. The relative size of allocation within a single Priority Axis is justified by the relative cost of investment in these areas over others (fewer projects for more money) and the benefits for strategic policy integration and coordination. Rationale for allocation is based on:

- These investments, alongside skills investments, have been identified as Welsh Government economic development policy priority for public investment in terms of supporting jobs and growth; in particular in helping lever subsequent private sector investments.

- Investments are essential for all other ESI investments to ensure retention of businesses and skills in the programme area and to attract new businesses and skilled workers to the area.

- The major investments needed have been identified variously as high priority in the UK CSRs, UK NRP and domestic policy such as the Programme for Government and Wales Infrastructure Investment Plan and need as much support as possible, though careful targeting will be required to ensure structural funds add the most value possible.

- Transport investments essential to enable the rest of the ESI programmes and to try and capture and retain the benefit of those investments in the programme area, thus reducing increasing economic disparities. Real risk of benefits sought from investments in the programme area being realised.

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70 A comparison in June 2013 indicated equivalent projects constituted around 54% of programme commitment.
outside the programme area without improvements in local business sites and connectivity to those sites.

- TO8 to support integrated territorial investments supporting sustainable development and regeneration of places brings together a number of disparate place-based interventions previously spread across the Operational Programme and is justified in seeking genuine integration in planning development of places to improve the attractiveness for businesses. Significant falls in available funding reflects a tighter focus expected on prioritisation within regional or urban economic strategies, aligning with the Sustainable Urban Development approach set out in the regulations and committing more than the 5% suggested ERDF to these activities.
Table 2: Overview of the Programme Investment Strategy

<table>
<thead>
<tr>
<th>Priority Axis</th>
<th>Fund</th>
<th>Union Support (EUR)</th>
<th>Share of the total union support to the operational programme (by Fund and priority axis)</th>
<th>Thematic Objective</th>
<th>Investment Priority</th>
<th>Specific Objectives corresponding to the Investment Priority</th>
<th>Common and Programme Specific results indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ERDF</td>
<td>x</td>
<td>x%</td>
<td>(1) Strengthening research, technological development and innovation</td>
<td>(1a) enhancing research and innovation infrastructure (R&amp;I) and capacities to develop R&amp;I excellence and promoting centres of competence, in particular those of European interest;</td>
<td>SO1. To increase the success of Welsh research institutions in attracting competitive and private research funding.</td>
<td>Research Income for HEIs in WW&amp;V (data from HESA) (£) Business Expenditure on Research and Development (BERD) (£)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SO2. To increase the level of innovation undertaken across all sectors of the Welsh economy, in particular within Welsh SMEs, leading to a growth in productivity.</td>
<td>Innovation Active Enterprises (% of total)</td>
</tr>
</tbody>
</table>
1b) promoting business investment in innovation and research, and developing links and synergies between enterprises, R&D centres and higher education, in particular product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in Key Enabling Technologies and diffusion of general purpose technologies.

SO3. To increase the successful translation of research and innovation processes into new and improved commercial products, processes and services, in particular through improved technology transfer from HEIs.

Average share of total turnover from product innovation, and novel innovation: new to market, new to business and significantly improved (%)

<table>
<thead>
<tr>
<th>Thematic Objective (4)</th>
<th>Supporting the shift to a low-carbon economy in all sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4f) promoting research in, innovation in and adoption of low-carbon technologies</td>
<td></td>
</tr>
</tbody>
</table>

SO4. To increase the success of Welsh research institutions in attracting competitive and private research funding (related to low carbon research and innovation).

Research Income for HEIs in WW&V (data from HESA) (£) Business Expenditure on Research and Development (BERD) (£)

SO5. To increase the successful translation of low Carbon research and innovation processes into new and improved commercial products, processes and services, in particular through improved technology transfer from HEIs.

Average share of total turnover from product innovation, and novel innovation: new to market, new to business and significantly improved

<table>
<thead>
<tr>
<th>2</th>
<th>ERDF</th>
<th>x%</th>
<th>(3) Enhancing the</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3a) promoting entrepreneurship, in particular by facilitating the</td>
<td>SO1. To increase the amount of finance available to SMEs for both</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market assessment of gap in finance (£)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thematic Objective (4)</td>
<td>Supporting the shift to a low-Carbon economy in all sectors</td>
<td>(1a) promoting business investment in innovation and research, and developing links and synergies between enterprises......</td>
<td>(1b) supporting the capacity of SMEs to engage in growth in regional, national and international markets, and in innovation processes</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3</td>
<td>ERDF X</td>
<td>x%</td>
<td></td>
</tr>
<tr>
<td>Thematic Objective (7) Promoting sustainable transport and removing bottlenecks in key network infrastructures</td>
<td>SO2. To increase the number of small scale renewable energy schemes established.</td>
<td>Number of sites generating electricity from renewable sources (excluding PV)</td>
<td></td>
</tr>
<tr>
<td>SO1. To address issues of peripherality and improve private investment in local areas through improvements to the functioning of the Trans-European Transport Network (TEN-T).</td>
<td>Investment induced (£) Travel times</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO2. Increasing urban and labour mobility to and from key urban and employment centres</td>
<td>Employment rate by year in West Wales and the Valleys Travel times</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO3. To increase access of Welsh businesses to high speed ICT networks in peripheral areas and strategic sites.</td>
<td>Proportion of premises that are in postcodes served by NGA networks (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO4. To increase employment through investments in prioritised local or regional infrastructure supporting a regional or urban economic strategy.</td>
<td>Employment level (no 16-64)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>of accessibility to and development of specific natural and cultural resources;?</td>
</tr>
</tbody>
</table>
Section 2

Description of the Priority Axes.
2.1 PRIORITY AXIS 1: Research and Innovation

1. This Priority Axis is focused on the development of research, technological development and innovation. In addition to the actions under Thematic Objective 1 the Priority Axis supports activity under Thematic Objective 4, Investment Priority (IP) 4f related to R&D and Innovation in the field of low-carbon technologies. This approach will support co-ordinated actions consistent with the Grand Challenge areas identified in Science for Wales.

2. The two specific objectives relating to IP(4f) are exactly the same as two of the specific objectives for Thematic Objective 1, but relate to sector-specific investments in the Low-Carbon arena. Because of this it is a more natural fit under this Priority Axis as the Smart Specialisation approach will be a key tool to help prioritise investments. The Managing Authority will allocate funding and report on these elements of this axis separately to demonstrate a contribution to the earmarking targets associated with Thematic Objective 4.

3. Activity under TO4 in this Priority Axis is expected to be able to support Research and Innovation relating to a range of renewable energy technologies and therefore has close links to the objectives and aims of the Renewable Energy and Energy Efficiency Priority (RE&EE). Where the RE&EE Priority will provide a specific focus on enabling the development of a marine energy sector (with some complementary R&I activity), this Priority will seek to support those technological advances, demonstrations and innovations where Smart Specialisation can be demonstrated for a range of other renewable energy and low carbon sources (e.g. photovoltaic, fuel cells, etc).
INVESTMENT PRIORITY 1 of Priority Axis 1: (1a) enhancing research and innovation infrastructure (R&I) and capacities to develop R&I excellence and promoting centres of competence, in particular those of European interest;

4. **Specific Objective 1:** To increase the success of Welsh research institutions in attracting competitive and private research funding.

**Description of baseline and results**

5. Two results indicators are proposed to reflect both the long-term structural change being sought and the shorter to medium term impact being sought.

6. As set out in the strategy and the Partnership Agreement the key structural issue is a relative lack of Business Expenditure on R&D (BERD). This is therefore set as a context indicator with a qualitative target only. This should ensure all projects are able to demonstrate they are looking at how activity can lever private investment in R&D within the programme area.

7. BERD in Wales in 2011 was £255 million, representing 1.5% of the UK total. The BERD figures fluctuate in Wales subject to the investment programmes of a small number of businesses, but long terms trends are positive with increases in both cash and proportional terms. This also represents nearly 46% of all research expenditure in Wales, though lags the Lisbon target of two thirds of research to be carried out by the private sector.

8. In order to be able to set a target for a shorter term impact the selected indicator seeks to provide a measure of the research funding coming to Wales (albeit limited to HEI institutions, given limited data availability). A key factor for the location of research-intensive businesses and the development of smart specialisation is the endogenous research capacity in the programme area. This should help demonstrate an improving capacity and capability in key research priority areas.

9. Data shows that research income in West Wales and the Valleys is concentrated on Swansea, Aberystwyth and Bangor; together accounting for 98% of research income in the programme area. This figure is even higher for the more competitive funding (e.g. EU, Central Government or Research Council funds). As a whole the programme area accounts for 43% of the total income across Wales (and Wales accounts for 3.8% of the total UK research income).
Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement Unit</th>
<th>Category of region (where relevant)</th>
<th>Baseline Value</th>
<th>Baseline Year</th>
<th>Target Value (2023)</th>
<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Research Income for HEIs in WW&amp;V (data from HESA)</td>
<td>£</td>
<td>West Wales and the Valleys</td>
<td>£102,588,000</td>
<td>2011/12</td>
<td></td>
<td>Higher Education Statistics Agency</td>
<td>Annual</td>
</tr>
</tbody>
</table>

Actions to be supported under the Investment Priority

10. The scope of this Investment Priority provides for specific challenges of innovative and research intensive businesses to be addressed and for specific research infrastructure investments outside of the SME Competitiveness and Infrastructure priorities.

11. The ERDF programme will seek to build the capacity and address other barriers to Welsh institutions successfully accessing competitive research funds. A key outcome will be for supported institutions to have the capacity to carry out internationally recognised collaborative research and to be bidding collaboratively for competitive research funding from the UK and the EU, such as Horizon 2020. This will help support the continued development of the Welsh research base, which in turn will help encourage inward investment, business expenditure on research, and the development of research-intensive and innovative clusters.

12. Research infrastructure has the potential to catalyse the knowledge creation process and facilitate the networking of researchers and stimulate knowledge flows generally. It can act as the catalyst for inward investment, co-location of research-intensive industry, development of supply chains and the exchange and transfer of innovation and knowledge\textsuperscript{71}. There are already emerging clusters and existing infrastructure in Wales (including major investments in Grand Challenge areas) that provide a basis on which to build.

13. A small number of significant investments in R&D infrastructure were made under the 2007-2014 ERDF programme\textsuperscript{72}, increasing the availability of facilities suitable for highly specialised research as well as business incubation by 10,000 square meters. This Priority will seek to increase the specialised research infrastructure where this can clearly demonstrate that

\textsuperscript{71} For example a series of case studies of exemplar regions demonstrating smart specialisation, all of which involve the development of clusters around key research infrastructure: An analysis of the effects of Structural Funds support for Research, Technological Development and Innovation 2000-2010 (2011) available at: http://ec.europa.eu/invest-in-research/pdf/download_en/rkf5th_brochure.pdf

\textsuperscript{72} Institute for Life Sciences 2, Centre for Nanohealth, Arts and Innovation Centre
it will increase the capacity and capability to undertake world class research, encourage inward investment and develop existing and emerging capability.

14. Types of action to be supported to address key barriers:

- Building research capacity and capability. For example through:
  - centres of excellence
  - supporting cluster development, through infrastructure and supply chain development
  - applied research, development of prototypes
  - collaboration and networks, in particular industrial and international links
  - investment in technology and technology transfer
  - building partnerships
  - increasing interaction and influence with external bodies

- Capacity building to address barriers to accessing competitive research funding. For example to develop more competitive bids, building networks, finding international partners, new ways of working.

- All investments should have a focus on areas with potential for developing or strengthening world-class excellence (e.g. through Smart Specialisation and identified in Science for Wales) and should identify links to Sêr Cymru and National Research Networks.

The guiding principles for the selection of operations

15. Actions supported under this Investment Priority will support the Innovation Wales key theme of prioritising and creating critical mass and support the continued development of the Welsh research base, which in turn will help encourage inward investment and the development of research-intensive and innovative clusters. Science for Wales will be the key guiding policy for this objective and investments will need to demonstrate they are consistent with the emerging focus on excellence advocated and are complementing activity taking place in the Grand Challenge areas of: Life Sciences and Health; Low carbon, Energy and Environment; Advanced Engineering and Materials; all underpinned by ICT and the Digital Economy. These broadly align with other efforts to prioritise societal challenges, such as those identified as funding priorities for Horizon 2020.

16. Projects will also be tested on their contribution to the Smart Specialisation strategy (also incorporating Innovation Wales) and subject to technical assessment by experts in respective research fields. Projects will be expected to be able to demonstrate a clear route along the ‘stairway of excellence’ whereby they will be expected to be applying for competitive

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73 Grand Societal Challenges identified as: Health, demographic change and wellbeing; Food security, sustainable agriculture, marine and maritime research, and the bio-economy; Secure, clean and efficient energy; Smart, green and integrated transport; Inclusive, innovative and secure societies; Climate action, resource efficiency and raw materials
funds. As part of this projects will be expected to collaborate with international partners, thereby addressing one of the key barriers which impede organisations accessing international research funding.

17. Industrial engagement is essential for the development of internationally successful clusters and an essential component in increasing levels of business expenditure on R&D. Projects will be encouraged to seek industrial engagement where possible, especially where they can involve Welsh SMEs or attract SMEs to Wales.

18. Research and Innovation are two elements of the “knowledge triangle”, with education as a third element. All three will need to work in concert to maximise impact. Research activity could have commercial application for SMEs for instance, and there may be a need to underpin the investment with the skills development of both the researchers and individuals in SMEs. Projects that consider and combine elements of all three pillars will be encouraged. As a minimum projects will need to be coordinated with one another across this Priority and with the rest of the ERDF and ESF programmes (in particular skills elements of the ESF). The possibility of joint investments should be explored. Links to wider investment programmes will also be sought where possible and appropriate (see Section 8).

The planned use of financial instruments

19. There are no plans to deliver action under this Investment Priority through financial instruments.

The planned use of major projects

20. Where a strong case for significant investment in R&D facilities can be made a major infrastructure project might be feasible during the programme period (e.g. centre of excellence in one Smart Specialisation priority area); however, no major project is currently planned.

Table 5: Common and programme specific output indicators for the ERDF, the ESF and the CF (by Investment Priority, broken down by category of region for the ERDF and the ESF)

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of enterprises cooperating with supported research institutions*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td>2</td>
<td>Enterprises accommodated</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td>3</td>
<td>Number of improved research infrastructure facilities</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td>4</td>
<td>Amount of research funding secured</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td>5</td>
<td>Number of new FTE</td>
<td>FTE</td>
<td>ERDF</td>
<td>Less</td>
<td></td>
<td>Monitoring</td>
<td>Quarterly</td>
</tr>
<tr>
<td>researchers in supported entities*</td>
<td>developed</td>
<td>data</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of researchers working in improved research infrastructure facilities*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed Monitoring data</td>
<td>Quarterly</td>
<td></td>
<td></td>
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</tbody>
</table>


INVESTMENT PRIORITY 2 of Priority Axis 1: (1b) promoting business investment in innovation and research, and developing links and synergies between enterprises, R&D centres and higher education, in particular product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through Smart Specialisation and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in Key Enabling Technologies and diffusion of general purpose technologies.

21. Specific Objective 2: To increase the level of innovation undertaken across all sectors of the Welsh economy, in particular within Welsh SMEs, leading to a growth in productivity.

Description of baseline and results

22. The 2012 Global Innovation Index Report rated the UK as fifth amongst 141 countries on level of innovation and Welsh businesses report a relatively high involvement in innovative activities compared to other parts of the UK. Wales was however classed as “low” within the “innovation follower” ranking in the European Commission’s Regional Innovation Scoreboard 2012, lagging behind some other UK regions. The long-term aim will be for Wales to move towards the “innovation leader” category.

23. The Regional Innovation Scorecard covers a wide basket of indicators and a number of these are collected on a UK basis in the UK Innovation Survey. This found that Wales generally outperformed the UK average in terms of involvement in innovation and type of innovation. For example 40.6% of enterprises in Wales were “innovation active” (3rd highest region) compared to an average of 36.8% across the UK. This innovation is not as likely as other regions to be focused on R&D (accounting for 23.4% of innovation expenditure win Wales – the 3rd lowest of UK regions – against the UK average of 33.9%).

Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
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<th>Category of region (where relevant)</th>
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<th>Baseline Year</th>
<th>Target Value (2023)</th>
<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Innovation Active Enterprises</td>
<td>% of total</td>
<td>Wales</td>
<td>40.6%</td>
<td>2008-2010</td>
<td></td>
<td>UK Innovation Survey</td>
<td>Every 2 years</td>
</tr>
</tbody>
</table>

24. **Specific Objective 3**: To increase the successful translation of research and innovation processes into new and improved commercial products, processes and services, in particular through improved technology transfer from HEIs.

**Description of baseline and results**

25. HEBCIS data\(^{76}\) indicates a well developed and effective knowledge transfer system between HE and business in Wales although the UK Innovation Survey\(^{77}\) reported that only 15% of innovation-active businesses cooperate with universities in the UK. This suggests significant scope for greater interaction.

26. Broader Innovators in the UK Innovation Survey are distinguished from Innovation Active enterprises in that they will have carried out “activities in areas such as internal research and development, training, acquisition of external knowledge or machinery and equipment linked to innovation activities”. These enterprises in Wales demonstrate above average scores for a range of innovation factors, including introduction of new and improved goods and services, entering new markets and increasing market share. Wales has the highest proportion of Broader Innovators in the UK (43.3% for 2008-2010). This should provide a key advantage for increasing the benefits of commercialisation but enterprises in Wales self-identify a greater number of barriers to innovation than other regions, with the availability and cost of finance a key barrier to innovation (addressed specifically in the SME Competitiveness Priority Axis).

27. These high levels of innovation activity across Welsh enterprises are not resulting in the same levels of successful new products or even improved products that can be seen in other regions. Welsh enterprises report only 22.4% of turnover from innovation is related to new or significantly improved products, processes or services (against a UK average of 29.7%). This is the lowest of all UK regions.

**Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))**

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
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<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3</td>
<td>Average share of total turnover from product innovation, and novel innovation: new to market, new to business and significantly</td>
<td>%</td>
<td>Wales</td>
<td>22.4%</td>
<td>2010</td>
<td></td>
<td>UK Innovation Survey (BIS)</td>
<td>Every two years</td>
</tr>
</tbody>
</table>

\(^{76}\) *Higher Education – Business and Community Interaction Survey (2013), HEFCE.*

\(^{77}\) *UK Innovation Survey 2011 (2012), BIS*
Actions to be supported under the Investment Priority

28. This Priority will include support set out below and, in doing so, will contribute primarily to two of Innovation Wales’ five key themes - providing flexible support for innovation (through Specific Objective 2); and improving collaboration (through SO3).

29. Innovation Wales recognises that pockets of world class expertise exist in academia in areas with commercial potential. It also recognises emerging clusters of Smart Specialisation (although these may currently be lacking in global scale) as well as opportunities to build on existing best practise in the commercialisation of R&D. The Welsh National Research Networks will cover the Grand Challenge areas and will provide leadership for knowledge transfer and commercialisation activity.

30. Under SO2, this Priority will support the provision of flexible support for innovation which can address specific barriers for innovative or research focused businesses, as well as for businesses seeking to increase innovation or use of research. The actions will be complemented by the repayable financial support for innovation available from Priority 2 of this Programme: SME Competitiveness.

31. We recognise that innovation can be carried out by any organisation (e.g. private, third and public), and is not only linked to science and technological research by academia and business. We want to be able to encourage innovation in all sectors, in particular where they can help address the grand societal challenges (for example eco-innovation).

32. Success cannot be guaranteed and failure is an essential part of innovation; SO3 (and some targeted investments under SO2) with therefore seek to support a balanced portfolio of investments using the Smart Specialisation approach to encourage pilot activities, applied research and innovation with a high risk of failure alongside those with clear market exploitation potential.

33. The Priority will also support initiatives to promote knowledge transfer, the dissemination of new technologies, and the commercialisation of research based on market pull - the need and ability of businesses to exploit knowledge and a business culture which encourages problem solving in the workplace78.

78 Also a key feature of Innovation Union Flagship Initiative under Europe 2020
34. The European Commission\textsuperscript{79} defines Research and Innovation as interrelated but independent concepts (essentially research to improve our knowledge base and innovation as new ways of doing things that may include use of research).

35. The ERDF programme will seek to increase investment in applied research or experimental development with a clear link to economic outcomes, where it can contribute to growth and productivity in the programme area. ERDF will not simply substitute domestic funds for competitive funds. Opportunities to co-invest with other organisations, such as the Technology Strategy Board or Nesta\textsuperscript{80}, should be explored where possible.

36. Examples of the type of actions to be supported are:

- Support businesses to undertake innovation (e.g. demand-led or eco-innovation) and improve innovation supply chains\textsuperscript{81} between businesses and with academia

- Support for open innovation and diffusion of key technology

- Support to address the barriers to innovation e.g. the lack of an innovative culture or environment

- Piloting of initiatives to test innovative products, processes or services in areas with commercial potential

- Support the development of prototypes, pilot schemes, demonstrations and working models

- Development of low-cost hubs or clusters for innovative businesses and sectors (e.g. virtual hubs for ICT, Creative or Tourism sector)

- Development and launch of innovative new uses and adaptations for existing technology, processes or services into new markets

\textsuperscript{79} *Innovation Union - A rationale for action* (2010), European Commission. Available at: http://ec.europa.eu/research/innovation-union/pdf/rationale_en.pdf. This describes research and innovation as:

- Research: investment of resources in attempts to expand scientific and technological knowledge base, often in order to solve particular problems that confront different sectors of society.

- Innovation: creation of value via the introduction of new products, processes, services and ways of doing things; requires knowledge inputs not only from scientific and technological research, but also from other sources such as non-technological, user-driven and social innovation.

\textsuperscript{80} Formerly NESTA, (National Endowment for Science, Technology and the Arts)

\textsuperscript{81} The innovation supply chain (as opposed to innovation in the supply chain) is the process by which companies obtain and/or develop future products, processes and services and improve on their current products, processes and services.
- Commercialisation, protection and exploitation of research (including applied research to improve market readiness)

- Improved industrial and SME collaboration with Universities and other research intensive institutions.

- Support for the development of Smart Specialisation clusters with a focus on commercial application of research and innovation.

- Investments in advanced manufacturing and production capabilities (e.g. first production of Key Enabling Technologies)

**The guiding principles for the selection of operations**

37. Support from this Priority will be consistent with the overriding principle of *Innovation Wales* in that innovation will be promoted across the whole economy but that significant levels of dedicated support to clusters, institutions, businesses or for specific technologies or innovations should be made on the basis of building on Wales’ strengths. This focus on activities that are already strong or are showing promise follows the Smart Specialisation\(^{82}\) concept and the Welsh Government's Grand Challenge areas. Expert advice will be sought to assist with the prioritisation of investments in line with the governance arrangements for the Smart Specialisation Strategy.

38. Significant investments are expected to be prioritised using the Smart Specialisation approach where expertise and genuine specialisation is being demonstrated. It is expected that this will primarily be around the Grand Challenge areas though other specialisms may emerge through entrepreneurial discovery. The Managing Authority will make use of technical and expert advice to ensure support is targeted appropriately, ideas are credible, realistic and do not duplicate existing research or innovation.

**The planned use of financial instruments**

39. No use of financial instruments is envisaged for this Investment Priority, but there may be scope to utilise the financial instruments under the SME Competitiveness Priority to complement actions under this Investment Priority.

**The planned use of major projects**

40. No major projects are anticipated under this Investment Priority

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\(^{82}\) *Smart Specialisation – The Concept, Knowledge Economists Policy Brief n° 9* (2009), Dominique Foray, Paul A. David and Bronwyn Hall
Table 5: Common and programme specific output indicators for the ERDF, the ESF and the CF (by Investment Priority, broken down by category of region for the ERDF and the ESF)

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measure unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2022)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of enterprises cooperating with supported research institutions*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving grants*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving non-financial support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of new enterprises supported*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Private investment matching public support in innovation or R&amp;D projects*</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Employment increase in supported enterprises*</td>
<td>FTE</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of enterprises supported to introduce new to the market products*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of enterprises supported to introduce new to the firm products*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of patents registered for products</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of pilot projects completed</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Enterprises adopting or improving their equality strategies</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Enterprises adopting or improving their environmental sustainability</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>
INVESTMENT PRIORITY 3 of Priority Axis 1: “(4f) promoting research in, innovation in and adoption of low-carbon technologies”. (Article 87 (2) (b) (i))

41. Specific Objective 4: To increase the success of Welsh research institutions in attracting competitive and private research funding (related to low carbon research and innovation).

Description of baseline and results

42. In addition to the description of the baseline set out in SO1, the transition to a low-carbon economy as a key element of green growth has been identified across the EU and within Wales as presenting significant opportunities for future growth and jobs. The UK Department for Energy and Climate Change predicted that 250,000 new jobs will be created in the UK energy sector alone by 2020. Energy and the Environment is one of the Grand Challenge areas set out in Science for Wales which asserts Wales’ considerable relevant expertise within the Higher Education sector. A number of emerging smart specialisms are also identified in Innovation Wales.

43. In order to support the transition to a low-carbon economy through Research and Innovation a range of competitive funds have been put in place to support the development of renewable energy and energy efficient technologies and innovations. Welsh research institutions face the same barriers to accessing this competitive funding as they do other Research and Innovation funding and no separate data collection or baseline exists on the same basis.

44. This Specific Objective will therefore contribute to the results set out in Specific Objective 1. It is difficult to obtain information at a Wales level, so disaggregation at a technology or sector-specific level is not currently possible. Consideration will be given in the Evaluation Plan as to whether it is possible for an evaluation to be carried out to determine the change in funding for related technology areas in Wales.


84 Planning our electric future: technical update (December 2011), DECC. Available at: www.gov.uk/government/publications/planning-our-electric-future-technical-update

85 For example Cardiff EcoDesign Centre, Low Carbon Research Institute, Sustainable Buildings Envelope Centre, Alternative Fuels, etc.
Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement Unit</th>
<th>Category of region (where relevant)</th>
<th>Baseline Value</th>
<th>Baseline Year</th>
<th>Target Value (2023)</th>
<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>Research Income for HEIs in WW&amp;V (data from HESA)</td>
<td>£</td>
<td>West Wales and the Valleys</td>
<td>£102,588,000</td>
<td>2011/12</td>
<td></td>
<td>Higher Education Statistics Agency</td>
<td>Annual</td>
</tr>
</tbody>
</table>
45. **Specific Objective 5:** To increase the successful translation of low Carbon research and innovation processes into new and improved commercial products, processes and services, in particular through improved technology transfer from HEIs.

**Description of baseline and results**

46. The aims and objectives for this Specific Objective are the same as for Specific Objective 3 and will therefore contribute to the same result (which does not differentiate between technology or types of innovation). Consideration will be given in the Evaluation Plan as to whether it is possible for an evaluation to be carried out to determine the change in commercialisation and benefits realisation of related low carbon technology and innovation areas in Wales.

47. Analysis undertaken by the UK Department for Business Innovation and Skills in 2010 valued the Welsh environmental goods and services sector at £4.1bn in 2008/09, employing well over 40,000 people, and the sector is expected to continue growing. Energy Wales reiterates the Welsh Government’s belief that Wales is well placed to take advantage of the transition to a low carbon economy.

48. There is some existing expertise in alternative fuels and Wales is in a good position to exploit the opportunities of the Low Carbon Vehicles sector, particular in terms of the automotive sector. Wales also benefits from significant academic expertise in developing and integrating low-Carbon technologies, for example through the Low Carbon Research Institute which is a partnership of a number of Universities across Wales, and has established a significant economy in the renewable and low carbon sectors.

**Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))**

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement Unit</th>
<th>Category of region (where relevant)</th>
<th>Baseline Value</th>
<th>Baseline Year</th>
<th>Target Value: (2023)</th>
<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6</td>
<td>Average share of total turnover from product innovation, and novel innovation: new to market, new to business and significantly improved</td>
<td>%</td>
<td>Wales</td>
<td>22.4%</td>
<td>2010</td>
<td></td>
<td>UK Innovation Survey (BIS)</td>
<td>Every two years</td>
</tr>
</tbody>
</table>

Actions to be supported under the Investment Priority

49. A range of emerging Smart Specialisation clusters and assets are highlighted in Science for Wales and Innovation Wales. There is potential to build on this through further investment in Research and Innovation, with an emphasis on demonstration to encourage commercialisation and private sector investment.

50. Support remains necessary for proof-of-concept for new technologies and demonstration. Investments through the structural funds will need to focus on areas of specialism where organisations will be competitive, and specific efforts should be made to ensure benefits are realised within the programme area.

51. Types of action to be supported are the same as for the complementary Specific Objectives 1 and 3 set out earlier in this chapter, but only where directly related to the transition to a low-Carbon economy. Examples might include:

- Capacity building and cluster development for priority research areas to support Smart Specialisation in Low-Carbon technologies attracting private investment and competitive research funding.

- Research, Development and Innovation relating to proof-of-concept for emerging and transition renewable energy and energy efficiency technologies (e.g. photovoltaic, energy generating building envelopes, hydrogen energy systems).

- A particular emphasis might be expected in research and demonstration in key Smart Specialisation and priority areas (for example Smart living\textsuperscript{[87]} technology demonstration, applied advanced powertrain and battery research for electric and hydrogen vehicles, or smart grid / distribution)

- Development and implementation of low Carbon strategies supporting the territorial demonstration of benefits from research and innovation, particularly the economic benefits for specific geographical areas.

The guiding principles for the selection of operations (Article 87 (2) (b) (iii)CPR)

52. Projects will also be tested on their contribution to the Smart Specialisation strategy (covering both Science for Wales and Innovation Wales) and subject to technical assessment by experts in respective research fields.

53. Projects will be expected to be able to demonstrate a clear route along the ‘stairway of excellence’ whereby capacity building activity will be expected
to be able to demonstrate a specialism and direct route to successfully applying for competitive funds and attracting private investment. As part of this projects will be expected to collaborate with international partners, thereby addressing one of the key barriers which impede organisations accessing international research funding.

54. Similarly, projects supporting activity closer to commercialisation will be expected to demonstrate a fit with existing or emerging Smart Specialisation areas. They would be expected to link to existing assets and research and demonstrate a clear route to market whereby private investment can be attracted and benefits to the programme area can be realised.

55. Low carbon strategies would still be expected to follow the principles of Smart Specialisation and be subject to expert assessment to ensure that demonstration and proof of concept relates to areas of existing or emerging expertise and with a realistic opportunity for benefits within the programme area. An integrated low carbon strategy would allow for a more system-led approach to demonstrate different technologies and innovation working together as a system for greater collective impact rather than individual units.

The planned use of financial instruments (Article 87 (2) (b) (iii)CPR)

56. No planned use of financial instruments

The planned use of major projects (Article 87 (2) (b) (iii)CPR)

57. No major projects are currently envisaged for this Investment Priority.

Table 5: Common and programme specific output indicators for the ERDF, the ESF and the CF (by Investment Priority, broken down by category of region for the ERDF and the ESF)

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2022)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of enterprises receiving support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving non-financial support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of enterprises cooperating with supported research institutions*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of enterprises supported to introduce new to the market products*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of enterprises supported to introduce new to the firm products*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private investment matching public support in innovation or R&amp;D projects*</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employment increase in supported enterprises*</td>
<td>FTE</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of patents registered for products</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of pilot projects</td>
<td>Number</td>
<td>ERDF</td>
<td>Less</td>
<td>Monitoring</td>
<td>Quarterly</td>
<td></td>
</tr>
</tbody>
</table>
2.A.4 Performance Framework

Table 6: The performance framework of the Priority Axis (by fund and category of region)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition of the indicator or implementation step</th>
<th>Measuremenent unit, where appropriate</th>
<th>Fund</th>
<th>Category of region</th>
<th>Milestone for 2018</th>
<th>Final target (2022)</th>
<th>Source of data</th>
<th>Explanation of the relevance of the indicator, where appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprises receiving support</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.A.5 Categories of Intervention

Table 7: Dimension 1 Intervention Field

<table>
<thead>
<tr>
<th>Code</th>
<th>€ amount</th>
<th>Cod e</th>
<th>€ amount</th>
<th>Cod e</th>
<th>€ amount</th>
<th>Cod e</th>
<th>€ amount</th>
<th>Cod e</th>
<th>€ amount</th>
<th>Cod e</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 Research and innovation processes in large enterprises</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>058 Investment in infrastructure, capacities and equipment in SMEs directly linked to research and innovation activities</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Year</td>
<td>Budget</td>
<td>Year</td>
<td>Budget</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>-----------------------------------------------------------------------------</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>059</td>
<td>Investment in infrastructure, capacities and equipment in large companies directly linked to research and innovation activities</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>066</td>
<td>Research and innovation infrastructures (public)</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>061</td>
<td>Research and innovation infrastructures (private, including science parks)</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>062</td>
<td>Research and innovation activities in public research centres and centres of competence including networking</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>063</td>
<td>Research and innovation activities in private research centres including networking</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>064</td>
<td>Technology transfer and university-enterprise cooperation primarily benefitting SMEs</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>065</td>
<td>Cluster Support and business networks primarily benefitting SMEs</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>066</td>
<td>Research and innovation processes in SMEs (including voucher schemes, process, design, service and social innovation)</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>067</td>
<td>Research, innovation, technology transfer and cooperation focusing on the low carbon economy</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.A.6 Where appropriate, a summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries.

58. The planned use of technical assistance is described under Priority 5 of this Operational Programme.
2.2 PRIORITY AXIS 2: SME Competitiveness

1. The primary objective of this Priority Axis is to improve the competitiveness of SMEs in the programme area aligned to Thematic Objective 3 by promoting entrepreneurship and increasing the capacity of SMEs. Investment Priorities from another Thematic Objectives has been included given the relevance to increasing SME competitiveness and the alignment of the ex-ante assessment based on identified market failures with activity under this Priority Axis. This is (1b) promoting business investment in innovation and research etc.

2. Repayable finance for innovation (to be delivered through a Financial Instrument) will be supported through this Priority Axis to allow a single project helping address market failures in the access for finance for SMEs.

3. There are very close links between this Priority Axis and the Research and Innovation Priority Axis with both being vital to improve productivity and support business growth (traditionally spearheaded by innovative SMEs). The assessment informing the Financial Instrument in this area was done on the basis of market failure in the provision of finance, rather than based on the potential leverage effects on Business Expenditure on R&D. It is therefore included in this Priority Axis to reflect that distinction, though it is hoped it will be a complementary activity to support increased BERD (along with dedicated activity under the Research and Innovation Priority Axis).
INVESTMENT PRIORITY 1 of Priority Axis 2: (3a) promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators

4. **Specific Objective 1:** To increase the amount of finance available to SMEs for both business start-up and for business expansion.

**Description of baseline and results**

5. Survey evidence suggests that only 66% of Welsh SMEs were successful in accessing some of the finance they needed\(^ {88}\) which compares with around 74% across the UK\(^ {89}\). Data from the Welsh Small Business Survey\(^ {90}\) suggests that it is micro enterprises in Wales that face the biggest difficulties in gaining finance. The BIS Small Business Survey indicates that Welsh SMEs are generally finding it harder to access finance than their English counterparts (e.g. for result indicator it is 26% failing to access any finance in Wales, compared to only 21% across the UK and 20% in England). Banks are unlikely to return to their lending levels pre credit crisis and a gap in equity finance has been evidenced\(^ {91}\).

6. The ex-ante assessment of opportunities for Financial Instruments\(^ {92}\) identifies:

“There is a strong case for the ERDF programme to provide an integrated and coordinated approach to the provision of finance for SMEs, with the current JEREMIE fund providing a good basis upon which to build in the next programming period. This has the advantage of providing the scale necessary to be attractive to a major co-investor (such as the EIB), the ability to mix funding types in a fully integrated manner and to act as a credible partner to the range of SMEs in Wales seeking finance.

This fund of funds could have an overall capital value of between £120-£160million (including seed and early stage growth). A case could be made for increasing this in response a number of factors including the need for greater amounts of debt finance and the potential for early stage support.”

7. A market assessment has initially identified potential to support micro-loans, loans and risk capital (for business expansion). Further assessment identifies opportunities to combine this with additional seed, early stage and follow-on investments for R&D related activity; this element is addressed under Specific Objective 5, but activity would be expected to be closely coordinated, if not delivered together.

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\(^{88}\) 2012 Small Business Survey (2013), BMG Research for Welsh Government
\(^{89}\) BIS Economics Paper No. 16: SME Access to External Finance (January 2012), BIS
\(^{90}\) 2012 Small Business Survey (2013), BMG Research for Welsh Government
\(^{91}\) Gap for Wales’ regions being identified as part of ex-ante assessment for Financial Instruments
\(^{92}\) Wales Ex-ante Evaluation of European Programmes 2014-20 - Financial Instruments: Stage 2 (June 2013), Regeneris and Oldbell 3
<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Category of Region (where relevant)</th>
<th>Baseline value</th>
<th>Baseline year</th>
<th>Target value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>SMEs applying for finance (over last 12 months) but not being able to access any</td>
<td>%</td>
<td>Wales</td>
<td>26%</td>
<td>2013</td>
<td></td>
<td>BIS Small Business Survey (Table 73)</td>
<td>Annual</td>
</tr>
<tr>
<td>2.1</td>
<td>Market assessment of gap in finance</td>
<td>GBP</td>
<td>West Wales and the Valleys</td>
<td>0</td>
<td>2013</td>
<td></td>
<td>Ex-ante assessment of market for SME access to finance in Wales</td>
<td></td>
</tr>
</tbody>
</table>
8. **Specific Objective 2:** To increase the number of SME start-ups through the provision of information, advice and guidance and support for entrepreneurship.

**Description of baseline and results**

9. The situation and rationale for investment regarding entrepreneurship, birth rates and business creation has been set out in the strategy of this programme. Across Wales 8,225 new enterprises were counted in 2011 (provisional data); this compares to around 7,500 new enterprises in 2010. Within West Wales and the Valleys this figure was 4,850 in 2011 (provisional), compared with 4,325 in 2010.

10. Since 2009 the number of business deaths in Wales has outstripped the number of births, leading to a net reduction in the active businesses in Wales of 3,145. In West Wales and the Valleys the net reduction in active businesses over the same period was 2,425, representing 77% of the net Welsh reduction. Supported actions should not only increase the numbers of new businesses in Wales but should also be seeking to increase the survival rates of those supported businesses compared to average survival rates. This should be possible given that the support should include more tailored, targeted, and therefore relevant advice. Impact on survival rates will be considered in the evaluations of this element of the programmes.

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Category of Region (where relevant)</th>
<th>Baseline value</th>
<th>Baseline year</th>
<th>Target value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2</td>
<td>Count of birth of new enterprises</td>
<td>No</td>
<td>West Wales and the Valleys</td>
<td>4,850 (provisional)</td>
<td>2011</td>
<td></td>
<td>ONS (Business Demography)</td>
<td>Annual</td>
</tr>
</tbody>
</table>
Actions to be supported under the Investment Priority

11. Particular consideration should be given to the need to provide Social Enterprises with specialist advice and guidance to enable start-ups and promote growth where gaps evidenced in mainstream support for SMEs.

12. Types of action to be supported across Investment Priority (covering both Specific Objective 1 and Specific Objective 2):

- Access to debt, equity and mezzanine finance
- Micro-finance investment vehicle
- Tailored business finance schemes (e.g. for key sectors, specific geographic areas or growth businesses)
- Advice and mentoring for start-ups
- Pre-start entrepreneurship activity (e.g. ability to test business ideas or support for graduate and high potential starts).
- Customised delivery of support for social enterprise creation (including the promotion of innovative business models) where there are evidenced gaps in mainstream provision

The guiding principles for the selection of operations

13. The priority’s support will take account of the Welsh Government’s key sectors approach, which targets some tailored support on economically important and potential growth sectors (including those which have exhibited high growth in the past) as well as offering advice and information to all businesses where private sector provision is lacking.

14. Financial support will primarily be focussed on providing debt, equity and mezzanine finance. Given the recognition of the need to be able to tailor support, provision will need to be retained to support other repayable or grant packages in exceptional circumstances and where economic conditions dictate. Evidence from counterfactual impact evaluations of support given to firms across the EU\(^93\) indicates that often loans are as effective as a grant. The stage of business development will also be an important consideration in deciding the efficiency of allocating a grant or loan.

15. Advice and information may be offered universally at a relatively low cost through websites and dedicated help-lines. The more in-depth, tailored support and investment will be targeted and dependent on: the growth potential of the business; the lifecycle of the business recognising the

\(^93\) *What are counterfactual impact evaluations teaching us about enterprise and innovation support?* (2012), Daniel Mouqué, DG Regio, European Commission
“critical events” of business growth; and gaps in the provision by the private sector.

16. This approach acknowledges that evidence on the economic benefits of non-financial support to businesses by government is mixed. A targeted approach is being pursued which will generate the greatest return on the investments. The approach will also complement the Smart Specialisation approach which advocates a concentration of resources on a few key priorities where a region has an existing or emerging specific strength, rather than spreading investment thinly across a broad number of areas or trying to develop capacity without some endogenous capability.

17. It is recognised that there is an opportunity to encourage greater involvement from the private sector in delivering information and advisory services, but there is arguably a key role for the public sector in the interim. It is also recognised that social enterprises may encounter difficulties with accessing ‘mainstream support’ and require different or tailored approaches to the delivery of support.

18. Complementarity, particularly around the early stages of entrepreneurship, will be sought with investments likely to be made under the ESF. For example ESF support should help to remove barriers to entrepreneurship, such as skills, while ERDF will be used to provide finance and support to turn ideas into businesses.

The planned use of financial instruments (Article 87 (2) (b) (iii)CPR)

19. The second stage ex ante assessment on the use of financial instruments for delivering this programme indicated that there is a strong case for the ERDF programme to provide an integrated and coordinated approach to the provision of finance for SMEs. This should cover micro-loans, loans, and risk capital. It is envisaged that the majority of SO1 will be delivered through a Financial Instrument, building on the experience of JEREMIE.

The planned use of major projects (Article 87 (2) (b) (iii)CPR)

20. No major projects are anticipated, given Financial Instruments will be used instead.

Table 5: Common and programme specific output indicators

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94 A review of the literature addressing the role of external knowledge and expertise at key stages of business growth and development (2005), J. Bessant, B. Phelps and R. Adams, Cranfield School of Management.
95 Spatial Economics Research Centre Discussion Paper 98. The Causal Effects of an Industrial Policy (January 2012), Criscuolo (OECD, CEP, LSE) et al
96 http://s3platform.jrc.ec.europa.eu/home
97 Mid term evaluation of the Customer Engagement WG/EU project (2012), Old Bell 3 and Cardiff University
<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2022)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of enterprises receiving support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving grants*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving financial support other than grants*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving non-financial support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of new enterprises supported*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
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<tr>
<td></td>
<td>Individuals receiving support</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individuals receiving support - Female individuals</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individuals receiving support - BME individuals</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individuals receiving support - Disabled individuals</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individuals receiving non-financial support to set up a new enterprise</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Investment in enterprises</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private investment matching public support to SMEs*</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private investment matching public support to SMEs - Non-grants*</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
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<tr>
<td></td>
<td>Employment increase in supported enterprises*</td>
<td>FTE</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enterprises adopting or improving their environmental sustainability strategies</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enterprises adopting or improving their equality strategies</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
</tbody>
</table>
INVESTMENT PRIORITY 2 of Priority Axis 2: (3d) supporting the capacity of SMEs to engage in growth in regional, national and international markets, and in innovation processes

21. **Specific Objective 3:** To increase SME productivity through the provision of advice and guidance, in particular through encouraging ICT exploitation

**Description of baseline and results**

22. There are different calculations that can be carried out to determine levels of productivity but a reasonable proxy is turnover per employee. Using data available within Wales at the level of the programme area an indicator has been chosen based on this proxy. It should be noted that productivity improvements can mean a growth in turnover with a reduction in numbers of employees (e.g. through greater efficiencies or more automation). Productivity growth is essential, but that does not need to be entirely separate from employment growth and support under this Investment Priority will seek both. For this reason a Specific Objective and relating result indicator for growth related to employment is included later in this Priority Axis.

23. Using 2013 data at the programme area level a baseline for West Wales and the Valleys is set at £61,817 per employee (SMEs only). This compares to a Wales average value of £66,542 and a UK average value of £84,869. The West Wales and the Valleys value has increased from 2011 (from £61,970, a 2% increase) whereas average UK SME productivity has been maintained at broadly 2011 levels (£84,676, a 0.2% increase).

24. The target has been set based on expected outputs and the assumption that ICT exploitation will be the key driver of productivity growth for this specific objective.

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Category of Region (where relevant)</th>
<th>Baseline value</th>
<th>Baseline year</th>
<th>Target value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3</td>
<td>SME productivity: Calculated as turnover per employee</td>
<td>Average £ turnover per employee</td>
<td>West Wales and the Valley</td>
<td>63,189</td>
<td>2013</td>
<td></td>
<td>Size Analysis of Welsh Business (Welsh Governm ent)</td>
<td>Annual</td>
</tr>
</tbody>
</table>
25. **Specific Objective 4**: To increase the growth of those SMEs with growth potential, in particular through accessing new markets (both domestic and international)

**Description of baseline and results**

26. The Strategy section identifies tipping points that SMEs reach where a critical mass of knowledge and support needs to be in place for that SME to enter the next phase of growth. The tipping points and required support is addressed in the relevant sections below, but the result ultimately being sought in order to benefit the programme area is a growth in the number of employees as SMEs grow. Employment as an indicator for businesses located within the programme area reflects the benefit within the programme area better than other measures of growth such as numbers of businesses or turnover. Other data is not available at this level of detail.

27. There are large numbers of micro-enterprises in the programme area but these often represent lone traders, not necessarily with ambitions to grow. Micro enterprises in WW&V for 2013 accounted for 95% of SMEs by number, 55% of employment within SMEs and 40% of turnover. Since 2011 employment in micro-enterprises has increased by 9,000, but this is roughly equivalent to the net change in numbers of micro-enterprises (+8,265). This suggests that, while a vital part of the Welsh economy, including employment within micro-enterprises in the result indicator is likely to skew results given the increases in employment associated with new businesses, not with business growth. The new businesses element will be captured in the results indicator for SO2.

28. Small and Medium enterprises, however, have seen an increase in employment of 9,300 in WW&V since 2011 (from 159,800 to 169,100), alongside a net increase of 380 small and medium businesses. These are the SMEs in which the growth companies either already exist or to which an innovative micro-enterprise will be looking to transition towards. This subset of the data is therefore taken to form the result indicator, allowing for a target to be estimated. This won’t capture any SMEs that grow to large businesses (over 250 employees), but any should be captured by evaluation.

Table 3: Programme Specific Result indicators for ERDF/CF

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measure unit</th>
<th>Category of Region (where relevant)</th>
<th>Baseline value</th>
<th>Baseline year</th>
<th>Target value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4</td>
<td>Employment within small (10-49 employees) and medium (50-249) SMEs</td>
<td>No. in employment</td>
<td>West Wales and the Valleys</td>
<td>169,100</td>
<td>2013</td>
<td></td>
<td>Size Analysis of Welsh Businesses (Welsh Government)</td>
<td>Annual</td>
</tr>
</tbody>
</table>
Actions to be supported under the Investment Priority

29. With respect to the use of ICT to support productivity and growth, the BIS Small Business Survey 2012 provides a number of insights into the use of ICT infrastructure; for example, fewer Welsh SMEs promote their goods and services through a website (67% against UK average of 70%) but more Welsh SMEs actually sell those good and services through a website (43% against UK average of 41%). Relating directly to the selected result indicator, which incorporates a number of aspects of ICT exploitation, only 88% of Welsh SMEs (compared to 91-95% for other parts of the UK) report use of broadband for business and 10% reporting no use of the internet for business purposes (7% UK average).

30. In terms of increasing growth, the result being sought should be complementary to that sought for SO3 to increase productivity, given productivity can sometimes having a short term negative effect on numbers of employees. Targeting is therefore essential to ensure those SMEs with genuine growth potential are identified so that employment growth is sustainable (and not just contributing to lower productivity).

31. High growth businesses\(^98\), while small in number, remain key to driving productivity and increasing jobs - the UK compares well internationally with 5.8% of businesses “high growth” against US (c. 5%) and Italy (3%). It is very difficult to identify those businesses, especially when they are first formed, and a flexible approach is required to identifying, targeting and supporting such businesses.

32. The Mid Term Evaluation of the WG’s Customer Engagement project highlighted opportunities to further stimulate private sector involvement in business advice and guidance but also recognised the signs of on-going market failure in the provision of advice and guidance to businesses in Wales.

33. Types of action to be supported to promote both productivity and growth objectives might therefore include a combination of the following areas of support:

- Information and advice for business, such as universally available support to all SMEs e.g. through websites and help-lines.

- Tailored support for economically important and growth businesses, including Social Enterprises, to address barriers to improving productivity, for example: sales, marketing, product development, pricing and risk management

- Tailored advice and business support to address barriers to growth, for example: HR issues, strategy, marketing, business models,

\(^98\) A number of different definitions, including the OECD as those with at least 10 employees and who have experienced growth at an annual average of 20% over a three year period
systems, risk management, resource efficiency, operational improvement, product development, supply chains and distribution.

- Customised delivery of support for social enterprise development and growth (including the promotion of innovative business models) where there are evidenced gaps in mainstream provision

- Improve the exploitation of ICT assets (e.g. demand stimulation, demonstrations and promotion) and improve access to the digital economy (e.g. to undertake e-commerce and mobile phone commerce, developing new digital services and products, and addressing barriers to participation in the digital marketplace such as e-crime concerns)

- Capacity building, advice, guidance and support to address barriers for Welsh businesses to access procurement opportunities (including internationally)

- Support for the internationalisation of businesses and increasing exports, such as brokerage and partner events, trade fairs, training, counselling/advice/ mentoring, mission-related costs or other financial support, market research or other information services.

- Support for resource efficiency and energy efficiency measures within SMEs, including addressing barriers to related investment, supporting behavioural change, and supporting the diffusion of technology and innovation

34. Complementary measures to tackle e-crime need to occur in parallel to ICT exploitation efforts to increase business security and confidence and further support the productivity and competitiveness gains ICT exploitation can provide.

The guiding principles for the selection of operations

35. The Welsh Government has recognised that businesses are best placed to advise other businesses and that support should be procured rather than delivered directly by government\(^99\).

36. Evaluations suggest that for small and micro enterprises, basic business advice may be the single most cost effective form of support\(^100\). For more in depth support, evidence strongly suggests that support for SMEs of all sizes should be tailored, mixing appropriate financial and non-financial elements\(^101\). SMEs have a number of concerns relating to the seeking of

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\(^{99}\) Programme for Government, Welsh Government

\(^{100}\) What are counterfactual impact evaluations teaching us about enterprise and innovation support? (December 2012), Daniel Mouqué, DG for Regional and Urban Policy Evaluation and European Semester Unit, European Commission

\(^{101}\) Mid Programme Evaluation of the Start Up Service, ERS, Beaufort Research and Hywel Evans for the Welsh Assembly Government.
advice and information which point towards some of the market failures in this area\textsuperscript{102}. The concerns particularly relate to the expense and time involved with taking up formal business assistance, not being able to trust external advisors, or concerns about whether they would understand the business, and confidence in being able to access appropriate assistance.

37. Research suggests\textsuperscript{103} that identifying and targeting “high growth” firms is difficult although the growth intentions of businesses have a large effect on whether they will indeed grow\textsuperscript{104}. This suggests that flexibility will be required in terms of identifying growth potential and the intensive support for businesses identified as having growth potential must be equally flexible and tailored to individual company needs.

38. Social enterprises are also more likely to seek specialist and tailored business support\textsuperscript{105}, even though the support needs for social enterprises are broadly similar to other SMEs. Operations providing support for SMEs should fully consider the range of different challenges and barriers facing different businesses with different objectives and legal constitutions and consider tailoring delivery approaches and support. Despite this, social enterprises may encounter difficulties with accessing ‘mainstream support’ and require different or tailored approaches to the delivery of support.

39. Universally available information and advice should be available to all SMEs (though the design of the intervention will need to consider the specific requirements of key sectors or types of SMEs, such as social enterprises).

40. A range of barriers affect the uptake of resource efficiency and energy efficiency measures in businesses, particularly small and medium businesses, including it being a low priority, lacking expertise, lacking capital, and no compelling case given perceived long payback periods\textsuperscript{106}. Support will need to demonstrate market failure and take account of the other initiatives in the market such as the UK Government’s Green Deal\textsuperscript{107} or any other energy efficiency schemes. A focus for this activity would therefore be expected on those businesses in more energy intensive sectors where the greatest impact on competitiveness can be achieved.

The planned use of financial instruments (Article 87 (2) (b) (iii)CPR)

\textsuperscript{102} Research to understand the barriers to take up and use of business support (2011), Centre for Enterprise and Economic Development Research for BIS

\textsuperscript{103} Final Evaluation of Business Growth Programme (2012), BMG, Wavehill Ltd and Hywel Evans & Associates for the Welsh Government

\textsuperscript{104} ERC White paper: Growth and growth intentions (2013), Levie and Autio

\textsuperscript{105} Mapping social enterprise activity in Wales (October 2009), Welsh Government. Available at: http://wales.gov.uk/topics/housingandcommunity/regeneration/publications/110803socialmapping/?lang=en

\textsuperscript{106} Exploring the design of policies to increase efficiency of electricity use within the industrial and commercial sectors (November 2012), Carbon Trust & SPA Future Thinking for DECC

\textsuperscript{107} https://www.gov.uk/green-deal-energy-saving-measures
41. No financial instruments are anticipated in the delivery of this Investment Priority. The ex-ante assessment of financial instruments in Wales suggests there is no likely need at this stage. For resource efficiency actions, the UK Government’s Green Deal provides loan finance for businesses.

**The planned use of major projects (Article 87 (2) (b) (iii)CPR)**

42. There are no current plans for a major project under this Investment Priority.

**Table 5: Common and programme specific output indicators**

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2022)</th>
<th>Source of data</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number of enterprises receiving support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving grants*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
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<tr>
<td></td>
<td>Number of enterprises receiving financial support other than grants*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving non-financial support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
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<tr>
<td></td>
<td>Employment increase in supported enterprises*</td>
<td>FTE</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
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<td></td>
<td>Increase in level of export</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
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<tr>
<td></td>
<td>Private investment matching public support to SMEs*</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
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<tr>
<td></td>
<td>Private investment matching public support to SMEs - Grants*</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Private investment matching public support to SMEs - Non-grants*</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
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<tr>
<td></td>
<td>Number of enterprises supported to introduce new to the firm products*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Enterprises adopting or improving Environmental Management Systems</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Enterprises adopting or improving equality strategies and monitoring systems</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
<td>Quarterly</td>
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</tbody>
</table>
INVESTMENT PRIORITY 3 of Priority Axis 2: (1b) promoting business investment in innovation and research, and developing links and synergies between enterprises, R&D centres and higher education, in particular product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through Smart Specialisation and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in Key Enabling Technologies and diffusion of general purpose technologies.

43. **Specific Objective 5:** To address market failures in the availability of finance, in particular risk capital, for Welsh SMEs to undertake innovation and commercialise R&D.

**Description of baseline and results**

44. The UK innovation survey 2011 published by BIS in June 2013 found that 44.3% of innovative firms who try to obtain finance find it difficult to do so, compared to 32.6% of other firms, and 37.8% of innovative firms who tried to access finance were unable to obtain any (doubled from 14% in 2007/8)\(^\text{108}\). A culture of innovation is one of the features of high growth firms\(^\text{109}\) indicating that targeting of innovative firms and supporting innovation through risk capital might be useful.

45. Despite the apparent additional specificity in the UK innovation survey (relating to innovative firms), the same result indicator as for SO1 has been selected as these Specific Objectives are expected to be delivered together and are both addressing the headline issue of lack of access to finance. The consistency in data collection, questions posed and equivalent data (e.g. no double counting) make this a better target to measure the programme against its aim for integration and coordination for collective impact. As a Financial Instrument, separate reporting will be required on impact, as well as evaluation requirements.

46. Multiple sources of finance, needs of businesses and availability of data makes the annual business survey carried out by BIS the most consistent source of data, albeit lacking the detail evident in the ex-ante assessment. Required evaluations of Financial Instruments should seek to identify more direct impact of major EU funded schemes against the market analysis within the ex-ante assessment.

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\(^{108}\) *Credit and the crisis: Access to finance for innovative small firms since the recession* (June 2013), Neil Lee, Hiba Sameen and Lloyd Martin, Big Innovation Centre.

\(^{109}\) *Policies in support of high-growth innovative SMEs* (2011), European Commission.
Table 3: Programme Specific Result indicators for ERDF/CF

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Category of Region (where relevant)</th>
<th>Baseline value</th>
<th>Baseline year</th>
<th>Target value (2023)</th>
<th>Source of data</th>
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</tr>
</thead>
<tbody>
<tr>
<td>2.6</td>
<td>SMEs applying for finance (over last 12 months) but not being able to access any</td>
<td>%</td>
<td>Wales</td>
<td>26%</td>
<td>2013</td>
<td></td>
<td>BIS Small Business Survey (Table 73)</td>
<td>Annual</td>
</tr>
<tr>
<td>2.1</td>
<td>Market assessment of gap in finance</td>
<td>GBP</td>
<td>West Wales and the Valleys</td>
<td>0</td>
<td>2013</td>
<td></td>
<td>Ex-ante assessment of market for SME access to finance in Wales</td>
<td></td>
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</tbody>
</table>

**Actions to be supported under the Investment Priority**

47. The ex-ante assessment of opportunities for Financial Instruments identified an important role for finance to support the set-up, early growth and expansion of high-tech firms:

“There is clearly a strong case for publicly backed finance in Wales to support the commercialisation of R&D. The actions of Welsh Government and Finance Wales have played an important role in addressing the issue of market failure in the provision of finance, but also helping to stimulate R&D activity and the demand for finance to commercialise this.

Given the experience of JEREMIE, we would expect there to be capacity for in the order of a total fund of £20-£40 million over a five year period (of which ERDF would be roughly 50%).”

48. The market assessment resulted in initial recommendations for proof of concept funding to remain grant-funded but for early stage seed (between £20,000 and £50,000) and follow on investments (up to £100,000) as financial instruments. Early stage investments should reach between £50,000 and £1 million overall (including follow-on).

49. Actions to be supported are expected to consist of provisions for access to risk-capital finance and support for the creation and growth of research-intensive and innovative businesses, such as spin-outs. This should be complementary to any investments under Specific Objective 1. Examples include:

- Access to debt, equity and mezzanine finance
- Tailored business finance schemes (e.g. for key sectors or specific geographic areas)

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110 Wales Ex-ante Evaluation of European Programmes 2014-20 - Financial Instruments: Stage 2 (June 2013), Regeneris and Oldbell 3
The guiding principles for the selection of operations

50. The priority’s support will take account of the Welsh Government’s key sectors approach, which targets some tailored support on economically important and potential growth sectors (including those which have exhibited high growth in the past).

51. Financial support will primarily be focussed on providing debt, equity and mezzanine finance. Given the recognition of the need to be able to tailor support, provision will need to be retained to support other repayable or grant packages where economic conditions dictate. The stage of business development will also be an important consideration in deciding the efficiency of allocating a grant or loan.

52. Tailored support and investment will be targeted and dependent on: the growth potential of the business; the lifecycle of the business recognising the “critical events” of business growth\(^\text{111}\); and gaps in provision by the private sector.

53. Targeting should also consider how it can complement the Smart Specialisation approach\(^\text{112}\) which advocates a concentration of resources on a few key priorities where a region has an existing or emerging specific strength, rather than spreading investment thinly across a broad number of areas or trying to develop capacity without some endogenous capability.

The planned use of financial instruments (Article 87 (2) (b) (iii)CPR)

54. The ex ante assessment on the use of financial instruments for delivering this programme indicated that there is a strong case for the ERDF programme to provide an integrated and coordinated approach to the provision of finance for SMEs. Initial recommendations are for proof of concept funding to remain grant-funded but for early stage seed (between £20,000 and £50,000) and follow on investments (up to £100,000) to be delivered through a Financial Instrument. Early stage investments should reach between £50,000 and £1 million overall (including follow-on).

The planned use of major projects (Article 87 (2) (b) (iii)CPR)

55. No major project is anticipated.

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\(^{111}\) A review of the literature addressing the role of external knowledge and expertise at key stages of business growth and development (2005), J. Bessant, B. Phelps and R. Adams, Cranfield School of Management

\(^{112}\) [http://s3platform.jrc.ec.europa.eu/home](http://s3platform.jrc.ec.europa.eu/home)
Table 5: Common and programme specific output indicators

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of enterprises receiving support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving financial support other than grants*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Investment in enterprises</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private investment matching public support to SMEs*</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private investment matching public support to SMEs - Non-grants*</td>
<td>GBP</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employment increase in supported enterprises*</td>
<td>FTE</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of enterprises supported to introduce new to the firm products*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enterprises adopting or improving their environmental sustainability strategies</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enterprises adopting or improving their equality strategies</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
</tbody>
</table>

2.A.4 Performance Framework

Table 6: The performance framework of the Priority Axis (by fund and category of region)

<table>
<thead>
<tr>
<th>Implementation step, financial, output or result indicator</th>
<th>Measurement unit, where appropriate</th>
<th>Fund</th>
<th>Category of region</th>
<th>Milestone for 2018</th>
<th>Final target (2023)</th>
<th>Source of data</th>
<th>Explanation of the relevance of the indicator, where appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprises receiving support</td>
<td>Number</td>
<td>ERDF</td>
<td>Less Developed</td>
<td></td>
<td></td>
<td>Monitoring data</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>£m</td>
<td>ERDF</td>
<td>Less Developed</td>
<td></td>
<td></td>
<td>Monitoring data</td>
<td></td>
</tr>
</tbody>
</table>
## 2.A.5 Categories of Intervention

Tables 7-12: Categories of intervention (separate tables by category of region/Fund, if the Priority Axis covers more than one category or Fund)

### 2.A.6 Where appropriate, a summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries.

The planned use of technical assistance is described under Priority 5 of this Operational Programme.

<table>
<thead>
<tr>
<th>Code</th>
<th>€ amount</th>
<th>Code</th>
<th>€ amount</th>
<th>Code</th>
<th>€ amount</th>
<th>Code</th>
<th>€ amount</th>
<th>Code</th>
<th>€ amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td></td>
<td>03</td>
<td>00</td>
<td>00</td>
<td></td>
<td>03</td>
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</tr>
<tr>
<td>068</td>
<td></td>
<td>01</td>
<td>00</td>
<td>00</td>
<td></td>
<td>03</td>
<td></td>
<td></td>
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<tr>
<td>069</td>
<td></td>
<td>01</td>
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<td>03</td>
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<td>03</td>
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</tr>
<tr>
<td>073</td>
<td></td>
<td>01</td>
<td>00</td>
<td>00</td>
<td></td>
<td>09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>081</td>
<td></td>
<td>01</td>
<td>00</td>
<td>00</td>
<td></td>
<td>02</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.3 PRIORITY AXIS 3: Renewable Energy and Energy Efficiency

1. This Priority Axis covers a single thematic objective for ERDF in West Wales and the Valleys and therefore does not involve the combining of any Investment Priorities from different Thematic Objectives.

2. Research and Development and Innovation related to the transition to a low carbon economy – including that related to renewable energy and energy efficiency – is supported under Priority Axis 1. A focus for this Priority Axis is to support a suite of dedicated investments outside of the Smart Specialisation approach (which provides the focus for Priority Axis 1) in specific areas of renewable energy and energy efficiency.
INVESTMENT PRIORITY 1 of Priority Axis 3:
“(4a) promoting the production and distribution of energy derived from renewable sources”

3. **Specific Objective 1:** Increase the number of wave and tidal energy devices being tested in Welsh waters and off the Welsh coast, including multi-device array deployments, thereby establishing Wales as a centre for marine energy production

**Description of baseline and results**

4. Given the focus intended for this Specific Objective is on wave and tidal energy, it is difficult to find an indicator that offers that specificity (even at a UK-wide level). Of the data regularly collected in the Digest of UK Energy Statistics (DUKES), the majority of related indicators also include renewable energy from wind (already an established market).

5. Of those indicators that do have a breakdown, data is only available at a UK-wide level and relate to either installed capacity in wave and tidal or electricity generated from wave and tidal. Given the emphasis of this investment priority is not in direct generation of electricity but in preparing the ground for significant long-term private investment in the sector installed capacity has been selected as it seeks to focus on getting the capacity (and associated requirements to do so).

6. A modest target has been set as this is an end result of an expected accumulation of investments to improve the attractiveness of investment in Welsh marine and tidal energy. The majority of impact on this indicator that would be expected may well not materialise until after the programme investment; that will need to form part of the assessment of impact as part of the evaluation plan. The performance framework therefore seeks to capture this approach in terms of key implementation steps rather than attaching quantitative targets to a range of different activities.

**Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))**

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement Unit</th>
<th>Category of region (where relevant)</th>
<th>Baseline Value</th>
<th>Baseline Year</th>
<th>Target Value (2023)</th>
<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Installed capacity in wave and tidal.</td>
<td>MW</td>
<td>UK-wide</td>
<td>7</td>
<td>2012</td>
<td></td>
<td>Digest of UK Energy Statistics (table 6.4)</td>
<td>Annual</td>
</tr>
</tbody>
</table>

7. **Specific Objective 2:** To increase the number of small scale renewable energy schemes established.
Description of baseline and results

8. As at 31 December 2012 the installed capacity of sites generating electricity from renewable sources in Wales was 929.4 MW\textsuperscript{113}. The bulk of this capacity is through technology associated with a mix between small and larger scale schemes (e.g. wind and wave, solar and hydro account for over 90% of capacity). While data at the level of scale per scheme is not readily available an analysis of the regional capacity and generation noted above shows that Wales has 6% of the generating capacity, generates 5.5% of UK electricity from renewable sources, and yet has 6.8% of the total number of sites generating electricity. While generation is around the population share it potentially indicates a lack of major schemes; however the number of sites generating renewable energy suggests a demand for smaller scale renewable schemes.

9. The lack of regular and reliable data relative to the size of renewable energy schemes has led to the selection of a broader result indicator, which small schemes will influence. The key indicator selected is the number of sites generating electricity (excluding Photovoltaic) as this is most likely to be influenced by small scale schemes as capacity and amount of energy will be driven primarily by a few large schemes. The exclusion of Photovoltaic is necessary because of the large numbers of individual premises fitted with panels, skewing the figures (e.g. there were 27,173 sites generating from PV in 2012).

Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement Unit</th>
<th>Category of region (where relevant)</th>
<th>Baseline Value</th>
<th>Baseline Year</th>
<th>Target Value (2023)</th>
<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2</td>
<td>Number of sites generating electricity from renewable sources (excluding PV)</td>
<td>No.</td>
<td>Wales</td>
<td>493</td>
<td>2012</td>
<td>DUKES (DECC): Report on Renewable electricity in Scotland, Wales, Northern Ireland and the regions of England</td>
<td>Annual</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{113} Renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2012 (September 2013), DECC
Actions to be supported under the Investment Priority

10. This Priority is limited to supporting renewable energy and, while the Welsh Government recognises nuclear energy as a source of low carbon energy, the regulations specifically disallow direct investment in nuclear energy.

11. Research and development and innovation investments related to Renewable Energy and Energy Efficiency and other areas of Low-Carbon, Energy and Environment Welsh Government Grand Challenge area can be funded through the Research and Innovation Priority Axis, though they will be expected to consider their links to the Smart Specialisation approach. The Research and Innovation Priority Axis will enable support to develop and improve a wide range of renewable energy and energy efficiency technologies where there is an expertise or opportunity to capture benefits within the programme area (e.g. photovoltaic, offshore wind, fuel cells, sustainable buildings etc). Limited support for enabling infrastructure for offshore wind might incidentally be supported through this Priority where it shares requirements with the marine energy sector (e.g. shore based facilities, access, operation and maintenance).

12. SMEs in the Energy and Environment sector will be eligible for all business support and finance under the SME Competitiveness priority. Only specific investments directly linked to energy efficiency projects are envisaged in terms of sector and supply chain development through this priority.

13. Investments under this Investment Priority will be focused on developing the emerging marine energy sector in Wales and on enabling the development of small scale or community scale renewable energy schemes. All of these investments should be aimed at attracting additional investment into the programme area: major private investment in the case of marine energy; and finance from mainstream / private providers for small scale schemes.

Marine Energy (SO1)

14. Support contributing to this Specific Objective may be directed at a number of target groups in the marine energy innovation supply chain, from research institutions to SMEs to Local Government or any other organisation. Territorially, investments would be expected along the Welsh coast in identified areas with links to the specific resources and
opportunities identified in the Welsh Government’s Marine Renewable Energy Strategic Framework.

15. Given Wales’ comparative advantages there is the potential to become a significant market player in this area\(^{114}\), albeit in a nascent market; an opportunity not afforded in other renewable energy sectors in Wales, given the maturity of those sectors and market share already established for manufacture, operation and maintenance outside of the programme area.

16. Some private investment in marine energy in Wales is emerging\(^{115}\), but much more investment is needed to demonstrate commercial viability of emerging technology solutions, in particular through larger scale tests. Demonstrating these successfully in the programme area will help to ensure that economic benefits are realised in the programme area (for example research and development, manufacture, operation and maintenance).

17. Tidal and wave technology is only just reaching commercialisation, indicating a wider potential need for investment (e.g. infrastructure, R&D&I, demonstration of working models to make schemes more attractive to potential investors\(^{116}\)).

18. Emerging clusters in North Wales and South West Wales offer specific opportunities to develop the marine energy sector in a targeted way. To retain and develop existing businesses, as well as attract new businesses, these clusters will need access to viable test sites, improved connectivity and be able to successfully demonstrate technology.

19. Types of action to support the deployment of marine energy technology (tidal, wave and wind) as part of developing the Welsh sector (SO1):

- Marine energy innovation and R&D with commercial potential including prototypes, demonstrators and pre-commercial devices and arrays. May include a range of activity leading to this, including:
  - applied research,
  - design,
  - manufacture,

- Increase the capability to test marine energy devices off the Welsh coast by targeted infrastructure investments and preparatory work to remove barriers, reduce risks and maximise investor confidence. These investments should be aimed at encouraging deployment of pre commercial marine devices for testing and demonstration. For example:

\(^{114}\) Small clusters are developing in the South West and in North Wales, but creating new and attracting other businesses to Wales will be necessary to capture market share.

\(^{115}\) For example Marine Current Turbines off the coast of Anglesey and Tidal Energy Ltd off the coast of Pembrokeshire.

\(^{116}\) Marine Energy Technology Innovation Needs Assessment (TINA) (August 2012), Low Carbon Innovation Co-ordination Group (LCICG). Available at: [http://www.lowcarboninnovation.co.uk/working_together/technology_focus_areas/marine/](http://www.lowcarboninnovation.co.uk/working_together/technology_focus_areas/marine/)
Working draft 21 November 2013

- site preparation,
- shore-based facilities,
- connections
- access
- surveys

- Support to remove barriers and help part-finance test and demonstration devices and arrays.

Small scale / community scale energy schemes (SO2)

20. The ex-ante assessment to inform potential Financial Instruments in Wales for 2014-2020 and findings to date from Ynni'r Fro (community energy scheme funded through ERDF) suggest that there is already a good supply of capital finance, but there remains a need for advice and guidance for groups to address those barriers prior to reaching consent (and therefore having a financially viable proposition).

21. A number of mature technologies are available to support small scale and community scale low Carbon initiatives (e.g. wind, solar PV) but the adoption of such technology is expensive and not as widespread as it could be due to uncertainty caused by early stage project development and planning activity raising questions over commercial viability and benefits. There is a need to demonstrate viability on small scale / community scale and to support measures to speed up the process to help lever additional private resource into these models.

22. Support will be particularly focused on social enterprises and community groups where additional support would be required in the early stages of project development to get to a stage where other investors will be willing to invest. Schemes will be particularly encouraged where they form part of low-Carbon strategies for a specific area, and additional support will be necessary to achieve this given the relatively novel approach and as an additional exercise.

23. Types of actions anticipated include:

- Capacity development for local groups,
- Advice and guidance on setting up small scale renewable energy generation schemes
- Support for collaborative working with developers on community supported schemes
- Investments tailored to address barriers to accessing finance for small and community schemes supporting a low Carbon transition.

117 Wales ex-ante evaluation of European Programmes 2014-2020 – Financial Instruments, Stage 1 report (2013), Regeneris and OldBell3
Development and implementation of low Carbon strategies supporting the demonstration of benefits for a specific geographical area

The guiding principles for the selection of operations

24. Schemes will be expected to complement the activity of the Energy Wales Programme.

25. Business cases will need to clearly demonstrate market failure and that opportunities for co-investment and synergies with other funding programmes have been fully explored (for example UK, Welsh and Local Government schemes or specialist lenders, such as Triodos).

26. Proposals for investments in wave and tidal energy should demonstrate clearly how they fit with and take account of developments and technological advances in the field elsewhere in the UK and Europe. Proposals should also identify how Wales can maximise economic benefits in the long term from investments, including manufacturing, operation and maintenance, and continued research and innovation.

The planned use of financial instruments

27. The ex-ante assessment identified there is a good supply of finance for community / small scale schemes, and did not recommend the use of Financial Instruments. No Financial Instruments are therefore currently planned for this Investment Priority.

28. Finance for SMEs in the environmental goods and services sector will be available under SME Competitiveness Financial Instrument; therefore no specific vehicle is envisaged under this Investment Priority.

The planned use of major projects

29. No major project is currently anticipated under this Investment Priority.

30. If a single integrated package of support for marine energy deployment is developed (e.g. to develop sites, help deploy technology, or a combination of both) it might constitute a major project. This is far from certain and it more likely that separate proposals would be developed to address specific barriers or to develop specific clusters.
Table 5: Common and programme specific output indicators for the ERDF, the ESF and the CF (by Investment Priority, broken down by category of region for the ERDF and the ESF)

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of enterprises receiving support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of enterprises receiving non-financial support*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of enterprises supported to introduce new to the firm products*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Additional capacity of renewable energy production*</td>
<td>MW</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of pilot projects completed</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Community energy schemes</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Energy support site preparation schemes</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Number of renewable energy prototypes tested</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>
INVESTMENT PRIORITY 2 of Priority Axis 3: “(4c) supporting energy efficiency, smart energy management and renewable energy use in public infrastructures, including in public buildings, and in the housing sector”. (Article 87 (2) (b) (i))

31. **Specific Objective 3**: Increase the energy efficiency of the existing Welsh housing stock, particularly in areas of fuel poverty

**Description of baseline and results**

32. The selection of results indicators is difficult as there are difficulties in the collection and analysis of relevant data. For example energy consumption by household has been selected to track changes, but it should be noted that this only captures gas and electricity usage, whereas many parts of rural Wales rely on other sources of fuel. The complementary use of the Welsh Government’s indicator of fuel poverty is therefore also included to reflect this key element, and as it also considers the use of other fuels.

33. No target is set for the fuel poverty indicator as it is influenced by too large a range of other influences (e.g. energy prices, inflation, wages, employment levels, etc). It is nonetheless considered important to provide a focus for this Investment Priority and is therefore retained as a context indicator to be tracked.

34. A target has been set against the energy consumption by household, but evaluation is likely to provide a greater insight into the likely impact of these interventions. A number of factors influence energy use, including income levels (with those earning more likely to use more energy) and climate conditions (e.g. particularly cold winters). Data at local authority level allows for the energy consumption for gas and electricity provided below.

**Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))**

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement Unit</th>
<th>Category of region (where relevant)</th>
<th>Baseline Value</th>
<th>Baseline Year</th>
<th>Target Value (2023)</th>
<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3</td>
<td>Number and proportion of households in Wales estimated to be in extreme fuel poverty</td>
<td>No. (%)</td>
<td>Wales</td>
<td>61,000 (4.81% of housing stock in Wales)</td>
<td>2010</td>
<td>Welsh Government’s Fuel Poverty Annual Report</td>
<td>?</td>
<td></td>
</tr>
</tbody>
</table>
Actions to be supported under the Investment Priority

35. The SME Competitiveness Priority encourages support for sector and supply chain development, but provision in this Priority is included where it can directly link with the planned investments in energy efficiency in housing and businesses (and therefore supports simplification in developing schemes considering both supply and demand needs).

36. Existing schemes (such as Green Deal) will not address the causes of fuel poverty in the short term as savings will be used to repay the loan (and interest) over long pay-back periods and there is therefore little incentive for the fuel-poor to take part. The scale of the challenge dwarfs the available funding and the results to be sought for this Investment Priority needs to balance a need for targeting with a desire not to miss opportunities for economies of scale or flexible support.

37. Investing in energy efficiency will not only enable cost-effective reductions in greenhouse gas emissions, but will create business and employment opportunities for local labour. Wales has developed a comprehensive energy efficiency supply chain to take advantage of the opportunities to date offered by the promotion of energy efficiency (for example over 80% of the businesses that delivered phase 1 of Arbed operated primarily, or solely, in Wales). It is expected that this progress will be built upon to enable that supply chain to develop economies of scale to be able to take advantage of procurement and other opportunities as a result of the Energy Companies Obligation and other measures.

38. Types of action to be supported:

- Energy conservation and efficiency measures in existing housing. Consideration should be given to achieving multiple benefits, appropriate targeting to achieve that, and opportunities to utilise Financial Instruments (e.g. JESSICA).

- Energy efficiency advice and measures to encourage behavioural change

- Capacity building for SMEs to compete for contracts (e.g. as consortiums) to install energy efficiency measures.

The guiding principles for the selection of operations (Article 87 (2) (b) (iii)CPR)
39. Support for energy efficiency measures will need to take account of other initiatives in the market such as the UK Government’s Green Deal\textsuperscript{118}, Energy Company Obligation\textsuperscript{119}, as well as the scope to utilise Financial Instruments such as JESSICA\textsuperscript{120}.

40. The scale of the problem suggests a need to focus on those areas with the greatest market failure (for example those affected most by fuel poverty and least likely to engage in loan schemes such as Green Deal) and at the same time to consider economies of scale (e.g. where entire streets or communities can be covered).

41. Structural funds investments should be seeking to achieve multiple benefits at the same time as addressing an identified market failure. Investing in energy efficiency will not only enable cost-effective reductions in greenhouse gas emissions, but will create business and employment opportunities for local labour. These businesses should be encouraged to develop further to be in a position to help deliver wider schemes, such as the Green Deal across the UK.

The planned use of financial instruments (Article 87 (2) (b) (iii)CPR)

42. There is no planned use of Financial Instruments for this Investment Priority given the current existence of loan schemes such as Green Deal. The potential for repayable finance will be revisited during project development and assessment, including a review of the market at that time.

The planned use of major projects (Article 87 (2) (b) (iii)CPR)

43. Potential for both specific objectives under this Investment Priority to be delivered together as a major project. This would build on the experiences of delivering the Arbed programme during 2007-2013 and reflect the findings of the independent evaluation of that project. A market assessment will need to be carried out and clear targeting criteria identified.

\textsuperscript{118} https://www.gov.uk/green-deal-energy-saving-measures
\textsuperscript{119} https://www.gov.uk/energy-company-obligation
\textsuperscript{120} JESSICA (Joint European Support for Sustainable Investment in City Areas) supports sustainable urban development through financial instruments (e.g. revolving loan and investment funds) and amongst other things can be used to support energy efficiency investments (e.g. JESSICA scheme in London: http://www.leef.co.uk/).
<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of households with improved energy consumption classification*</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Estimated decrease of GHG*</td>
<td>tons of CO2</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>equivalent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.A.4 Performance Framework

Table 6: The performance framework of the Priority Axis (by fund and category of region)

<table>
<thead>
<tr>
<th>Implementation step, financial, output or result indicator</th>
<th>Measurement unit, where appropriate</th>
<th>Fund</th>
<th>Category of region</th>
<th>Milestone for 2018</th>
<th>Final target (2023)</th>
<th>Source of data</th>
<th>Explanation of the relevance of the indicator, where appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation step</td>
<td>Development of sites (qualitative progress towards outputs)</td>
<td>ERDF</td>
<td>Less Developed</td>
<td>Review of implementation</td>
<td>Will capture a key element of the support to enable the development of a marine energy sector t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>Number of households with improved energy consumption classification</td>
<td>ERDF</td>
<td>Less Developed</td>
<td>Monitoring data</td>
<td>Will capture activity for energy efficiency in housing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>Expenditure (£m)</td>
<td>ERDF</td>
<td>Less Developed</td>
<td>Monitoring data</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.A.5 Categories of Intervention

Tables 7-12: Categories of intervention (separate tables by category of region/Fund, if the Priority Axis covers more than one category or Fund)

<table>
<thead>
<tr>
<th>Category of region and Fund</th>
<th>Table 7: Dimension 1 Intervention field</th>
<th>Table 8: Dimension 2 Form of finance</th>
<th>Table 9: Dimension 3 Territory</th>
<th>Table 10: Dimension 6 Territorial delivery mechanisms</th>
<th>Table 12: Dimension 8 Thematic objective (ERDF/CF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>€ amount</td>
<td>Cod e</td>
<td>€ amount</td>
<td>Cod e</td>
<td>€ amount</td>
</tr>
<tr>
<td>011 Renewable energy: wind</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>04</td>
</tr>
<tr>
<td>012 Renewable energy: solar</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>04</td>
</tr>
<tr>
<td>013 Renewable energy: biomass</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>04</td>
</tr>
<tr>
<td>014 Renewable energy: hydroelectric, geothermal, marine energy and other</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>04</td>
</tr>
<tr>
<td>016 Energy efficiency renovation of existing housing stock, demonstration projects and supporting measures</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>04</td>
</tr>
<tr>
<td>042 Seaports (TEN-T)</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>04</td>
</tr>
</tbody>
</table>
2.A.6 Where appropriate, a summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries.

The planned use of technical assistance is described under Priority 5 of this Operational Programme.
2.4 PRIORITY AXIS 4: Increasing the Commercial Attractiveness of Places

1. This Priority Axis brings together Investment Priorities from three different Thematic Objectives in order to maximise the efficiency and impact of investments by aligning them with the priorities of the Wales Infrastructure Investment Plan for Growth and Jobs (WIIP).

2. The Welsh Government has published the WIIP to ensure that its future capital investment is used to deliver the maximum benefits to Wales. Given that its capital spending power has been reduced (40% lower in 2014-15 than 2010-11) the Government’s focus is on not only seeking innovative ways of financing infrastructure investments but on being very clear about priorities and driving greater economy and efficiency.

3. This Priority Axis intends to provide a range of support which can help to improve the attractiveness of places in the programme area; and by doing so attract further private investment to help drive employment growth. Actions supported under this Priority will be enablers for all other Priorities and also key to the success of the ESF programmes (e.g. to ensure skills investments do not simply result in movement of skilled labour out of the programme area); as such they will need to demonstrate how they will interact with other investments in a territorial area for greater collective impact.

4. The primary thematic objective will be “Promoting sustainable transport and removing bottlenecks in key network infrastructures” which will address issues of peripherality and lack of urban mobility, seeking to better link urban growth centres in the programme area to markets and improve access to employment opportunities across the region.

5. Digital connectivity is also of increasing importance for businesses and for business growth in urban centres. It is also key for those areas where there are issues of peripherality and lack of labour mobility, opening up greater opportunities for remote working. In terms of providing the right environment in which businesses can flourish and grow, and in turn create employment directly and through supporting supply chains, ICT connectivity is as important as transport connectivity. Indeed the two are mutually reinforcing with better ICT connectivity reducing the need to travel.

6. Investments in physical infrastructure are the key drivers of regeneration and employment growth within places. They can stimulate further investments in an area or region, in particular through inward investment or greater involvement of the private sector. As part of this, projects supported under this Priority should fully consider, and take advantage of, accessibility and connectivity issues. Activity under this Priority Axis is limited to connectivity to employment (transport or ICT) and development of strategic sites seeking to create employment. The intention is that the appropriate mix of activity to develop strategic sites should be determined.
by the relevant regional or urban authority, as long as it supports employment growth in a key centre and as part of a prioritised integrated territorial strategy. It is considered important to keep these activities together as they are mutually reinforcing and to contribute to a coherent investment strategy links to transport and ICT connectivity create opportunities for strategic sites.
INVESTMENT PRIORITY 1 of Priority Axis 4: “(7a) supporting a multimodal Single European Transport Area by investing in the Trans-European Transport Network (TEN-T) network”

7. **Specific Objective 1**: To address issues of peripherality and improve private investment in local areas through improvements to the functioning of the Trans-European Transport Network (TEN-T).

**Description of baseline and results**

8. Evidence suggests that the impact of investment in roads is strongest for local economies; bringing improvements in employment, productivity, numbers of businesses and wages\(^{121}\). Funding available would mean that only 2–4 significant schemes would be likely to receive support from this Investment Priority; those schemes must therefore both address the issue of peripherality and also maximise the local economic impact in order to help address widening regional disparities and underpin the range of other investments being made across the ESI programmes.

9. Employment, productivity, business creation and growth, and wages are all key elements being targeted by different parts of the ESI programmes; demonstrating how this Investment Priority can help to underpin all those other ESI investments to retain benefits within the programme area. Connectivity investment will have a direct short-term (and longer term) influence over is the location of firms (new to the area) and the investment they bring. A measure of investment induced has therefore been selected as it indicates that private sector investment is being unlocked in the local area as a result of investment in improved connectivity.

10. Because of the limited number of schemes and focus on generating local impact this is a dedicated indicator representing an accumulation of those schemes. The baseline is therefore set at zero.

**Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))**

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement Unit</th>
<th>Category of region (where relevant)</th>
<th>Baseline Value</th>
<th>Baseline Year</th>
<th>Target Value(^2) (2023)</th>
<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Investment induced</td>
<td>£</td>
<td>Less Developed</td>
<td>0</td>
<td>2013</td>
<td>Monitoring data and programme evaluations</td>
<td>Monitoring data and programme evaluations</td>
<td></td>
</tr>
</tbody>
</table>

Actions to be supported under the Investment Priority

11. The planned electrification of the South Wales rail network, in particular plans to electrify the Valleys lines, represents a significant investment which will help generate jobs and growth by reducing journey times and boosting passenger and freight capacity. The National Transport Plan maintains that Wales should aim to get more out of our transport infrastructure by integrating all modes to make the system work better, and increase more healthy and sustainable travel. Actions should seek to add value to existing and planned investments, address specific bottlenecks and address the issues of peripherality faced by the programme area. This will mean more of a focus on the local economic benefit (which will not penalise the scheme for being in peripheral areas). Further investments may be required in order to extract the maximum economic benefit for the programme area from this investment and to encourage modal shifts (e.g. in complementary sites and premises or local skills support to attract inward investment).

12. There are specific examples of bottlenecks in the network, for example the existing Britannia bridge is the only single carriageway section of the Trans European Road Network route E22 and acts as a significant bottleneck to commuter and holiday traffic and the A40 in West Wales is one of the lowest standard sections of the Trans European Road Network in the United Kingdom potentially acting as a barrier to further investment around the nearby Enterprise Zone.

13. Types of actions anticipated to support:

- Targeted investment in the Core or Comprehensive TEN-T road and rail network

The guiding principles for the selection of operations

14. Investment in TEN-T routes will have to be identified as nationally significant infrastructure schemes prioritised in Wales Infrastructure Investment Plan, utilising the improved business assurance process to maximise value for money.

15. Transport schemes can play an important role in promoting economic development but to be successful the other elements necessary for growth need to be present and are accompanied by complementary interventions. The specific investments in roads from this programme will need to demonstrate that they are addressing genuine bottlenecks, in terms of access to employment or that they are unlocking opportunities for economic growth at a regional level rather than just affecting sub regional or local choices for business locations.

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124 Promoting Growth in All Regions: Lessons from across the OECD (2011), OECD.
16. The local impact should be a major feature of any successful investment, particularly where it contributes to an integrated approach to development within a local, urban or regional area (e.g. to a regional strategy). There should be an expectation that investment will leverage additional private sector investments (e.g. through inward investment).

The planned use of financial instruments

17. There are no current plans to use Financial Instruments.

The planned use of major projects

18. No major project currently planned, though potential for significant TEN-T infrastructure scheme, given the scale of such investments.

Table 5: Common and programme specific output indicators for the ERDF, the ESF and the CF (by Investment Priority, broken down by category of region for the ERDF and the ESF)

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total length of reconstructed or upgraded roads (including TEN-T)*</td>
<td>Km</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
</tbody>
</table>
INVESTMENT PRIORITY 2 of Priority Axis 4: (7b) enhancing regional mobility through connecting secondary and tertiary nodes to TEN-T infrastructure, including multimodal nodes

19. **Specific Objective 2**: Increasing urban and labour mobility to and from key urban and employment centres

**Description of baseline and results**

20. Urban mobility, and good links between places of work and living, is central to an effectively functioning urban centre and to spreading the benefits of growth in urban centres more widely in the region. The European Commission Action Plan on Urban Mobility (2009) highlights that Cohesion policy cannot achieve its objectives without properly addressing issues of urban mobility, and suggests ERDF funding should be allocated in support of it where appropriate.

21. Consideration of City Regions in Wales has illustrated a mono-centric City Region in the South West of Wales and a polycentric City Region in the South East, as well as the importance of connectivity to England in North Wales. As the major growth centres a focus will be expected in improving connectivity to and between these urban areas.

22. Commuting flows are particularly pronounced around the two City regions (Cardiff / Newport and Swansea) with significant flows between Cardiff, Newport and the Valleys regions\(^{125}\). Significant improvements in sustainable transport and better connectivity would improve access to employment for people in more peripheral areas where unemployment rates are high. Furthermore it would enable the regions to properly exploit the potential for agglomeration effects noted in other city regions across the UK and Europe. There are also opportunities to increase the volume of freight travelling by more sustainable means (e.g. rail) at the same time as improving labour market mobility.

23. ESF Leavers Surveys in Wales regularly show transport difficulties / barriers as one of main barriers identified by unemployed ESF Leavers for finding work (23% in the 2011 Leavers Survey), with a lack of job opportunities locally (which arguably could also reflect issues of access to employment) the most frequently cited (65% in the 2011 Survey)\(^ {126}\). In general, lower skilled workers have lower levels of access to private transport\(^ {127}\), and therefore fewer opportunities if access to jobs by public transport is difficult\(^ {128}\).

\(^{125}\) Statistical Bulletin: Commuting in Wales, 2011, Welsh Government
\(^{127}\) National Travel Survey (2011), Dft. Uses 2009 data.
\(^{128}\) Transport and Social Inclusion. Have we made the connections in our cities? (2010), PTEG
Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement Unit</th>
<th>Category of region (where relevant)</th>
<th>Baseline Value</th>
<th>Baseline Year</th>
<th>Target Value (2023)</th>
<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4</td>
<td>Employment rate by year in West Wales and the Valleys</td>
<td>%</td>
<td>West Wales and the Valleys</td>
<td>66.5</td>
<td>Year ending 30 Jun 2013</td>
<td></td>
<td>ONS</td>
<td>Annual</td>
</tr>
</tbody>
</table>

Actions to be supported under the Investment Priority

24. The planned electrification of the South Wales rail network\(^\text{129}\), in particular plans to electrify the Valleys lines, represents a significant investment which will help generate jobs and growth by reducing journey times and boosting passenger and freight capacity. The National Transport Plan maintains that Wales should aim to get more out of our transport infrastructure by integrating all modes to make the system work better, and increase more healthy and sustainable travel. Actions under this Investment Priority need to consider how they can help ensure the benefits of such major investments on TEN-T and other routes, such as electrification, are felt by those in more peripheral regions; supporting employment growth within those regions and through better access to urban centres.

25. Regional economic strategies are in development alongside City Region strategies and should help to identify secondary urban centres, which will also be of importance to employment growth. Enterprise Zones will also need to be supported as part of plan to increase links between urban centres and labour markets. In addition a move towards more demand-led skills development needs to be accompanied by improved urban mobility to ensure those skills are retained within the programme area.

26. The final advice and recommendations from the City Regions Task and Finish group\(^\text{130}\), commissioned by the Welsh Government identified opportunities for integrated transport solutions to improve connectivity of those regions with their hinterlands, and with each other. Actions under this Investment Priority should seek to complement and add value to those findings, particularly where they can support jobs and growth in Wales.

27. Enterprise Zones have been identified as particular clusters of economically important and growth sectors. To further support those


growth opportunities, accessibility options should be pursued that open up
the areas to a wider labour market and improve the attractiveness to new
businesses (e.g. Deeside Enterprise Zone has vacancies, but suffers from
a lack of accessibility to concentrations of economic inactivity along the
North Wales coast such as Rhyl to fill those jobs\textsuperscript{131}).

**North Wales**

28. In North Wales this might mean connectivity to the TEN-T route and
improvements in connectivity to the Enterprise Zones. Specific reference
would be expected to the findings of the North East Wales Integrated
Transport Taskforce findings in addition to the NTP, Regional Transport
Plans and WIIP.

**Mid-Wales**

29. In mid-Wales there may be related improvements as part of integrated
packages of investment essential to supporting employment growth. Any
proposals would need to be considered with IP4 under this Priority Axis to
determine the right package of support.

**South Wales**

30. Connectivity to and between the City Regions must be a key priority
across the programmes given the potential impact and population
concentrations in Wales. This will mean building on improvements in TEN-
T networks to ensure urban mobility benefits and agglomeration effects are
felt across the valleys.

31. Types of action to be supported could include:

- Intermodal and sustainable transport facilities that improve access
to employment and education (e.g. transport hub)

- Improvements to rail network where it can support additional
capacity, particularly where it can connect growth areas to areas of
unemployment (e.g. station improvements, signalling, etc).

- Targeted investment in local roads providing accessibility to the
TEN-T network, or addressing access specific bottlenecks (e.g.
access to employment centre), in particular where it improves
access to employment (e.g. enables bus route)

- Alleviation of urban congestion (e.g. traffic management, developing
low-carbon transport systems and strategies, promoting urban
mobility)

\textsuperscript{131} North East Wales Integrated Transport Task Force: Report to Minister for Economy,
The guiding principles for the selection of

32. A clear emphasis for this Investment Priority will be on sustainable transport. The vast majority of funding under this IP will be expected to be spent on schemes that will improve the use of sustainable transport modes, such as rail.

33. Studies assessing particular pinch-points and bottlenecks have informed the National Transport Plan and prioritisation in the Wales Infrastructure Investment Plan. Consistency will be sought with these planning documents, as well as Regional Transport Plans and regional economic strategies.

34. Investments under this Investment Priority will be expected, where appropriate, to be complementary with TEN-T investments and also feed into complementary investments in specific geographical areas to improve employment growth (IP4).

35. Opportunities for complementary investments as part of an integrated package will be particularly important to ensure that the full economic benefit of investing in infrastructure is realised.

The planned use of financial instruments

36. No financial instrument has been identified though further work is being undertaken to consider approaches to supporting vital infrastructure investments, including the potential for EIB funding.

The planned use of major projects

37. No major projects are currently envisaged for West Wales and the Valleys, though complementarity will be sought with the TEN-T major projects under IP1.

Table 5: Common and programme specific output indicators for the ERDF, the ESF and the CF (by Investment Priority, broken down by category of region for the ERDF and the ESF)

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public transport services created or improved</td>
<td>Vehicle Km</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intermodal facilities created or improved</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Footpath or cycleway created or reconstructed</td>
<td>Km</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total length of new railway line (including TEN-T)*</td>
<td>Km</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total length of reconstructed or upgraded railway line (including TEN-T)*</td>
<td>Km</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total length of newly built roads (including TEN-T)*</td>
<td>Km</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td></td>
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<td>--------------------------------</td>
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<td>----------------</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total length of reconstructed or upgraded roads (including TEN-T)*</td>
<td>Km</td>
<td></td>
<td>Quarterly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross passenger kilometres on public transport</td>
<td>Passenger km</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
38. **Specific Objective 3**: To increase the access of Welsh businesses to high speed ICT networks in peripheral areas and strategic sites.

**Description of baseline and results**

39. Wales had the lowest availability of cable broadband services (2012) and the second-lowest availability of fibre broadband (2013) among the UK nations. Access to Next Generation Broadband (NGB) and availability of superfast broadband (actual downstream speed of 30Mbit/s or higher) is lowest in Wales of all UK regions (48% compared to UK average of 73%; although this is up from 37% a year earlier). Significant investment in NGB (partly from the 2007-2013 ERDF Programmes) will see this situation improve significantly but there will remain a need to deliver broadband infill to the 4% of Welsh premises which will not benefit from the roll-out.

40. There is a broad consensus that a significant increase in bandwidth gives rise to a range of new applications which generate business benefits such as improved productivity and access to new markets, as evidenced from the step up to ADSL from dial up services.

41. As well as catching up to avoid widening disparities there are significant opportunities to attract and retain key businesses requiring Enterprise Class connectivity solutions. Larger businesses, businesses requiring upload speeds which match their download speeds (so called Symmetric services), and enterprises who need to connect securely from one site to another will need more tailored ICT connectivity and there is an opportunity to capture and retain these businesses in strategic sites.

42. There is a growing evidence base for of the economic benefits of 4G, 3G and 2G networks. Wales has the second lowest proportion of premises with outdoor coverage from 2G mobile networks (minimum for telephone and text services); with 1.2% of premises in Wales (20,000) in areas without 2G coverage. Wales had the second-highest proportion of premises in areas with outdoor 3G coverage from at least one of the major network operators in June 2013, at 97.7%, although it also had the lowest proportion of premises with similar coverage from all four 3G networks, at 56.9%. This is despite a greater reliance being placed on mobile devices and networks as sole telephone (23% compared to UK average of 15%)

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132 Communications Market Report: Wales (August 2013), OfCom

133 For example: Proven economic benefits of superfast broadband (2011), Arthur D Little; and The Impact of Broadband on the Economy: Research to Date and Policy Issues’ (2010), Global Symposium for Regulators (GSR)

134 For example: What is the impact of mobile telephony on economic growth (2012), Deloitte
and sole device to access the internet (9% of consumers, compared to UK average of 4%). There are opportunities to address these disparities.

Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(ii))

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurem ent Unit</th>
<th>Category of region (where relevant)</th>
<th>Baseline Value</th>
<th>Baseline Year</th>
<th>Target Value (2023)</th>
<th>Source of Data</th>
<th>Frequenc y of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5</td>
<td>Proportion of premises that are in postcodes served by NGA networks</td>
<td>%</td>
<td>Wales</td>
<td>48%</td>
<td>June 2013</td>
<td></td>
<td>The Communications Market survey: Wales, Ofcom</td>
<td>Annual</td>
</tr>
</tbody>
</table>

Actions to be supported under the Investment Priority

43. Next generation broadband is programmed to be delivered to 96% of the 1.4m premises in Wales by summer 2016 through a combination of normal market investment in broadband and the £205m grant funded Superfast Cymru programme part funded by the ERDF Convergence programme.

44. NGBW will deliver superfast broadband services which will be ideal for domestic premises and many small businesses. However, it will not be always suitable for larger businesses, nor those which require upload speeds which match their download speeds (so called Symmetric services), nor for enterprises who need to connect securely from one site to another. Opportunities to invest in strategic sites across Wales (e.g. relevant Enterprise Zones or areas of City Regions) should be considered on a case by case basis, particularly where it can be linked to research and innovation.

45. Telefonica (who own the mobile telecommunications company O2) have a license commitment to deliver 4G mobile telephony service to 95% (indoors) of Welsh premises by the end of 2017. This offers a significant opportunity to improve a full range of mobile connectivity issues through adding value to those investments and addressing the final 5% where possible through innovative solutions.

46. Types of action to be supported:

- Infrastructure improvements to improve connectivity of superfast broadband (completing networks where market failure)
• Innovative technology / solutions to improve broadband connectivity in not-spots and areas of low speed.

• Improvements to widen coverage of mobile networks (e.g. integrated approaches to 2G, 3G and 4G)

• Innovative technology / solutions to improve mobile connectivity (2G, 3G, 4G) in not-spots and areas of poor connectivity

The guiding principles for the selection of operations

47. Actions to stimulate the demand for, and uptake of ICT networks should be considered in the development of any proposals and direct links made where appropriate (including any ICT demand stimulation supported under the SME Competitiveness Priority Axis). There is a poor understanding amongst some businesses of the productivity benefits of telecoms networks which result in lower levels of take up. The full benefits of broadband will only be maximised if demand stimulation is pursued in parallel to supply side interventions.

48. Potential State Aid and competition rules should be considered at the earliest opportunity in any proposal, particularly where looking to support strategic sites.

The planned use of financial instruments (Article 87 (2) (b) (iii)CPR)

49. No financial instruments are anticipated in the delivery of this Investment Priority.

The planned use of major projects (Article 87 (2) (b) (iii)CPR)

50. No major projects expected at this time.

Table 5: Common and programme specific output indicators for the ERDF, the ESF and the CF (by Investment Priority, broken down by category of region for the ERDF and the ESF)

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Additional premises with broadband access of at least 30 Mbps</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Additional premises with broadband access of at least 30 Mbps* - Households</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Quarterly</td>
<td></td>
</tr>
</tbody>
</table>
INVESTMENT PRIORITY 4 of Priority Axis 4: “8 (a a) supporting employment friendly growth through the development of endogenous potential as part of a territorial strategy for specific areas, including the conversion of declining industrial regions and enhancement of accessibility to and development of specific natural and cultural resources”. (Article 87 (2) (b) (i))

51. **Specific Objective 4:** To increase employment through investments in prioritised local or regional infrastructure supporting a regional or urban economic strategy.

**Description of baseline and results**

52. Welsh labour market statistics are examined in detail in the socioeconomic analysis and as part of the ESF programmes more generally, with Wales lagging the UK, and West Wales and the Valleys lagging Wales. There are significant variances in employment rates and the reasons for those rates across the different Local Authorities in Wales. Generally, the areas with the lowest employment rates are in the Valleys areas, in particular in Blaenau Gwent (57.5%), Merthyr Tydfil (58.9%), and Neath Port Talbot (60.7%) compared with 66.7% in Wales and 70.0% in the UK in 2011.

53. Many of these areas suffer from poor physical infrastructure, under-developed tourism or natural assets and a lack of suitable or attractive premises for businesses as well as wider issues of low skills and economic inactivity. An integrated approach is therefore desirable that considers all elements together, but at the same time does not duplicate provision. A key element of this will need to be a prioritisation process which identifies growth opportunities for specific sites, rather than seeking employment growth everywhere.

54. Given the sub-regional areas to be targeted have not yet been identified or prioritised by the relevant regional or urban authorities the result indicator selected is employment rate across the entire region. The target relates to the overall cumulative increase in employment within the region, but clearly the figures will be more meaningful at a sub-regional basis (once the targeted areas have been selected). This will feature as part of the project assessment and monitoring and evaluation strategy.

**Table 3: Programme Specific Result indicators for ERDF/CF (by Specific Objective) (Article 87.2(b)(iii))**

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement Unit</th>
<th>Category of region (where relevant)</th>
<th>Baseline Value</th>
<th>Baseline Year</th>
<th>Target Value (2023)</th>
<th>Source of Data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
</table>
4.6 Employment level

<table>
<thead>
<tr>
<th>Number (persons 16-64)</th>
<th>West Wales and the Valleys</th>
<th>Year ending 30 Jun 2013</th>
<th>Employment rate by Welsh local area and year (stats Wales)</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>780,700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Actions to be supported under the Investment Priority

55. A limited number of spatially prioritised schemes will be supported that identify key regional or urban growth opportunities. These schemes will be driven by small number of key infrastructure investments that will encourage business investment and employment growth in the region. A number of spatial targeting mechanisms already exist across Wales and should be considered in the development of any schemes as they may help provide critical mass or specific opportunities. For example the Welsh Government’s Enterprise Zones and the developing “City Regions” approach encourage investments based on the potential of clusters or growth poles to promote economic development. Local Authorities are also preparing economic strategies on a regional basis. All of these will identify key infrastructure requirements and these offer opportunities for strategic targeting (e.g. in helping identify key strategic business sites and premises).

56. The Welsh Government’s regeneration framework, Vibrant and Viable Places, also seeks to target fewer investments in fewer places for greater strategic impact. The policy also places an emphasis on evidence, strategic planning and seeking holistic approaches that do not just focus on one aspect of regeneration (e.g. social cohesion through targeting the most deprived areas).

57. In seeking consistency with these approaches, actions under this Investment Priority should seek to respond to the central organising principle of sustainable development (i.e. demonstrate how investments will support economic, social and environmental outcomes) and as such should be focused on opportunities for growth (rather than solely seeking to mitigate the effects of decline).

58. Investments under this Investment Priority will be expected to demonstrate how they complement wider investment programmes and other strategic investments across the suite of ESI programmes. For example investments in TEN-T routes and accessibility might be complemented by regeneration of key strategic sites connecting to those routes to take full advantage of the TEN-T and accessibility investment (e.g. developing tourism opportunities opened up through better accessibility to the Heads of the Valleys or supporting new strategic sites for business clusters and manufacturing emerging as a result of complementary investments in connectivity and low Carbon energy in Anglesey and North Wales’ ports).

59. Types of action to be supported:
• Economically important investments in Wales’ physical infrastructure (built and natural/green). In particular those that are key parts of integrated regeneration and economic development schemes, such as tourism, culture or heritage assets

• Business sites and premises in strategic sites, including property development and land remediation.

The guiding principles for the selection of operations (Article 87 (2) (b) (iii)CPR)

60. Investments under this Investment Priority will either be supported through a Financial Instrument (see below) or through an integrated set of actions in a specific geographical area. These integrated actions might incorporate different actions as set out above, but should have a clear evidence-based focus on a specific growth area (e.g. tourism, strategic business sites, educational facilities, employment centre, etc). These should be identified in existing territorial strategies (e.g. regional economic strategy or City Region strategy).

61. Partnership working and collaboration will be the foundation of any support under this Investment Priority. In particular the Welsh Government, Local Government, Community actors, and local / regional private sector organisations. This should ensure any scheme is truly integrated and focused on the most appropriate growth area.

62. Selected areas are expected to be areas with employment growth potential rather than simply targeting areas in most deprivation. ERDF support should aim to provide the right environment for private investment and private sector involvement in a scheme, particularly through financial contributions, can represent one indication that a scheme is likely to be self-sustaining over the longer term and will be essential. Approved schemes will be required to make clear what complementary strategies they have in place, relating for example to transport links or parallel skills investments (possibly supported by ESF) to ensure that employment opportunities created are accessible to those in more deprived areas.

63. All proposals will be expected to demonstrate due consideration of existing and emerging key spatial initiatives, including the role of Enterprise Zones, Local Growth Zones, Business Improvement Districts, Communities First Clusters, and others. Enterprise Zones would be expected to feature in any proposals for business sites and premises in particular.

64. Proposals should also demonstrate economic market failure that once corrected will support an increase in employment and growth through the more effective optimisation of economic output by the market.

The planned use of financial instruments (Article 87 (2) (b) (iii)CPR)
65. The potential for an Urban Development Fund Financial Instrument is anticipated, subject to lessons from JESSICA approaches across the EU in 2007-2013. Initial findings suggest enough market failure and demand to support a fund utilising around £20-25m ERDF.

The planned use of major projects (Article 87 (2) (b) (iii) CPR)

66. No major projects anticipated under this Investment Priority.

Table 5: Common and programme specific output indicators for the ERDF, the ESF and the CF (by Investment Priority, broken down by category of region for the ERDF and the ESF)

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement unit</th>
<th>Fund</th>
<th>Category of Region</th>
<th>Target Value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land developed</td>
<td>Ha</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Premises created or refurbished</td>
<td>M²</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Jobs accommodated</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>SMEs accommodated</td>
<td>Number</td>
<td>ERDF</td>
<td>Less developed</td>
<td></td>
<td>Monitoring data</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>

2.A.4 Performance Framework

Table 6: The performance framework of the Priority Axis (by fund and category of region)

<table>
<thead>
<tr>
<th>Implementation step, financial, output or result indicator</th>
<th>Measurement unit, where appropriate</th>
<th>Fund</th>
<th>Category of region</th>
<th>Milestone for 2018</th>
<th>Final target (2022)</th>
<th>Source of data</th>
<th>Explanation of the relevance of the indicator, where appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>Gross passenger kilometres on public transport</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Will capture bulk of transport spending</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation step</td>
<td>Progress of regional development schemes</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Review of implement-ation</td>
<td>Will capture the Sustainable Urban Development elements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>£m</td>
<td>ERDF</td>
<td>Less developed</td>
<td>Monitoring data</td>
<td>Will capture the Sustainable Urban Development elements</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.A.5 Categories of Intervention
### Tables 7-12: Categories of intervention (separate tables by category of region/Fund, if the Priority Axis covers more than one category or Fund)

<table>
<thead>
<tr>
<th>Category of region and Fund</th>
<th>Code</th>
<th>€ amount</th>
<th>Code</th>
<th>€ amount</th>
<th>Code</th>
<th>€ amount</th>
<th>Code</th>
<th>€ amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 7: Dimension 1</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Intervention field</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railways (TEN-T comprehensive)</td>
<td>028</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Railways</td>
<td>029</td>
<td>01</td>
<td>05</td>
<td>00</td>
<td>07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile rail assets</td>
<td>030</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEN-T Reconstructed or improved road 0%</td>
<td>036</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other reconstructed or improved road (motorway, national, regional or local)</td>
<td>037</td>
<td>01</td>
<td>05</td>
<td>00</td>
<td>07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multimodal transport (TEN-T)</td>
<td>038</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multimodal transport</td>
<td>039</td>
<td>01</td>
<td>05</td>
<td>00</td>
<td>07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean urban transport infrastructure and promotion</td>
<td>046</td>
<td>01</td>
<td>05</td>
<td>00</td>
<td>07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent transport systems (including the introduction of demand management or tolling systems, IT monitoring control and information systems)</td>
<td>047</td>
<td>01</td>
<td>05</td>
<td>00</td>
<td>07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICT: High-Speed broadband network (access/local loop; &gt;/= 30 Mbps)</td>
<td>049</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICT: Very high-speed broadband network (access/local loop; &gt;/= 100 Mbps) 0%</td>
<td>050</td>
<td>01</td>
<td>05</td>
<td>00</td>
<td>02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education infrastructure (tertiary, vocational and adult learning)</td>
<td>052</td>
<td>01</td>
<td>05</td>
<td>05</td>
<td>08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business infrastructure (including industrial parks, sites)</td>
<td>072</td>
<td>01</td>
<td>05</td>
<td>05</td>
<td>08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development and promotion of commercial tourism assets</td>
<td>074</td>
<td>01</td>
<td>05</td>
<td>05</td>
<td>08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development and promotion of commercial culture assets</td>
<td>076</td>
<td>01</td>
<td>05</td>
<td>05</td>
<td>08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation of industrial sites and contaminated land</td>
<td>087</td>
<td>01</td>
<td>05</td>
<td>05</td>
<td>08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development and promotion of the tourism potential of natural areas</td>
<td>089</td>
<td>01</td>
<td>05</td>
<td>05</td>
<td>08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection, development and promotion of public tourism assets</td>
<td>090</td>
<td>01</td>
<td>05</td>
<td>05</td>
<td>08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection, development and promotion of public cultural heritage assets</td>
<td>092</td>
<td>01</td>
<td>05</td>
<td>05</td>
<td>08</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.A.6 Where appropriate, a summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries.

The planned use of technical assistance is described under Priority 5 of this Operational Programme.
2.5 PRIORITY AXIS 5: Technical Assistance

Specific objectives and expected results (as defined by the Member state / region)

1. **Specific Objective 1:** To ensure the efficient and effective management of the 2014-2020 programmes.

2. **Specific Objective 2:** To enhance the integration and the complementarity of investments with other ESI funds and wider Commission led and Sector based programmes.

**Results expected.**

3. Specific Objective 1 aims to ensure that the programmes are delivered efficiently and effectively in Wales. The key measure which will underpin this objective and forms part of the compliance report for the programme will be the irregularity rate. This measure displays the total value of Irregularities reported to OLAF as a percentage of total certified eligible expenditure claimed by projects.

4. In 2013 the irregularity rate for the programme area was 0.53%, well below the 2% threshold used by the EC to implement corrective action.

5. Specific Objective 2 aims to ensure that the programmes compliment and are integrated with all ESI funds in Wales and wider Commission, Welsh Government and Sector Led programmes. Measurement of this activity will primarily be in the form of the outputs such as the number of collaborative projects delivered.

**2.B.2 The list of result indicators (only where the union support to TA in the OP exceeds EUR 15 million)**

Table 13: Result indicators for ERDF/CF/ESF

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator</th>
<th>Measurement Unit</th>
<th>Baseline Value</th>
<th>Baseline year</th>
<th>Target Value (2023)</th>
<th>Source of data</th>
<th>Frequency of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Irregularity Rate</td>
<td>Percentage</td>
<td>0.53%</td>
<td>2013</td>
<td></td>
<td>WEFO Compliance Report</td>
<td>Annual</td>
</tr>
</tbody>
</table>

**2.B.3 Actions to be supported and their expected contribution to the specific objectives**

6. Technical Assistance is an essential resource for supporting the effective delivery of the Programme. The delivery of the 2014-2020 programmes requires a continued emphasis on strategic delivery with greater alignment and harmonisation of Structural Funds investments through the concentration of resources to achieve sustainable outcomes for jobs and growth.
7. In Wales there are a number of key areas which will be developed and undertaken by partner organisations and the Managing Authority itself in order to deliver to the objectives and to ensure the new programmes achieve the integration, concentration and focus required. Actions are not mutually exclusive to either of the objectives and have therefore been grouped around 6 key investment areas which collectively will ensure the objectives and associated results are achieved.

**Management**

8. Integration of funds will bring new administrative challenges for the Managing Authority, for example in the implementation of an enhanced role for Financial Instruments. The following indicative activities will enhance and strengthen strategic and integrated programme support and development.

9. Actions in support of the Specific Objectives will include:

- To continue to enhance the internal programme management function in the development and delivery of integrated and sustainable programmes;
- To advise and support the development of projects, encouraging innovation, transnational cooperation, sharing of good practice and mainstreaming;
- To provide high quality technical advice and expert functions, in areas relating to, for example; procurement, financial (to include Financial Instruments) and scientific expertise, project development, complaint resolution, innovation and compliance and to reduce the administrative burden on beneficiaries;
- To develop and enhance bespoke and integrated IT systems for the delivery of ESI Funds and to aid e-Cohesion; and,
- To provide specialist advice and support to projects on the integration, implementation and monitoring of the Cross cutting themes.

**Partnership and Networking**

10. Strong partnerships and networks lie at the heart of the successful implementation of the programmes and the integration of the ESI funds at a national, regional and local level. The Managing Authority will continue to engage partners, including social partners, and key stakeholders in programme implementation and delivery.

11. Actions in support of the Specific Objectives will include;

- Encouraging and facilitating collaborative projects and approaches;
- Alignment with European Commission led, ESI fund and Sector based programmes;
- Enhancing capacity for cross programme coordination and the integration of ESI funds with national expenditure and programmes; and,
• Strengthening coordination and liaison mechanisms with partnerships and promoting partnership working.

**Monitoring**

12. A single Programme Monitoring Committee (PMC) will be established to oversee the effectiveness, quality and integration of the European Structural and Investment Funds programmes. Technical assistance will be used, where eligibility allows, to ensure the efficient and effective management of the programme through supporting the duties of the PMC, and its sub-committees.

13. Actions in support of the Specific Objectives will include;
• Enhanced management support to the PMC, and its' sub committees, and improved reporting to the European Commission; and,
• Expenditure on PMC and sub committee meetings, including expenses and fees for appointed experts (Experts appointed to the PMC based on merit will be remunerated in line with the Welsh Governments normal practice).

**Research and Evaluation**

14. Research and Evaluation continues to play a central role in helping the Managing Authority to manage programmes effectively. The specialist Research, Monitoring and Evaluation (RME) team within the Managing Authority will continue to design, carry out and manage programme level evaluations and provide or source expert advice and guidance to project level evaluations.

15. Actions in support of the Specific Objectives will include;
• Programme level research and evaluation, including research into the Cross Cutting themes;
• Provision of evaluation advice and guidance to sponsor organisations;
• Research and evaluation dissemination and workshops events; and,
• Management of research and evaluation exercises, for example through the Evaluation Advisory Group.

**Information and Publicity**

16. The success of a strategic integrated approach to the ESI funded programmes will depend to a large degree on a wide understanding among the sponsors, partners and stakeholders of its contents, governing regulations, aims and objectives. It is also essential that the benefits and achievements of the programmes are widely publicised to highlight the value added by the EU working in partnership with the Welsh Government and its partners.

17. Actions in support of the Specific Objectives will include;
• Dissemination of information, publicity and communication including guidance for partners and sponsors, seminars and workshops and networking events;
• Disseminating and promoting of the impacts of enhanced integration with ESI funds and wider sector programmes e.g. Horizon 2020;
• WEFO website development and maintenance;
• Diversity and accessibility initiatives; and
• The operation of a Helpline.

Audit and Control

18. WEFO have developed significant strengths in audit and control within the 2007-2013 programmes. Further enhancing the audit and control functions alongside a dedicated compliance unit will ensure that WEFO continue to build on developed strengths and maximise the opportunity structural funds investments can bring.

19. Actions in support of the Specific Objectives will include;
• Enhanced audit arrangements to ensure that these work effectively, improving quality and timelines;
• Improving irregularity monitoring and reporting; and,
• Provision of consistent advice and guidance to sponsors and partners through the WEFO compliance unit.
### Output indicators expected to contribute to results (by Priority Axis)

**Table 13: Output indicators for the ERDF, the ESF and the CF**

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicator (name of indicator)</th>
<th>Measurement unit</th>
<th>Target value (2023)</th>
<th>Source of data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of training events held</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
</tr>
<tr>
<td></td>
<td>Number of experts procured to provide advice</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
</tr>
<tr>
<td></td>
<td>Number of projects scoring Medium/High for Cross Cutting Themes</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
</tr>
<tr>
<td></td>
<td>Number of collaborative projects</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
</tr>
<tr>
<td></td>
<td>Number of research reports published</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
</tr>
<tr>
<td></td>
<td>Number of projects given Monitoring and Evaluation advice</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
</tr>
<tr>
<td></td>
<td>Number of dissemination events</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
</tr>
<tr>
<td></td>
<td>Number of events organised by WEFO</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
</tr>
<tr>
<td></td>
<td>Number of press releases issued</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
</tr>
<tr>
<td></td>
<td>Number of high profile project launches</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
</tr>
<tr>
<td></td>
<td>Number of e-newsletters issued</td>
<td>Number</td>
<td></td>
<td>Monitoring data</td>
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<td></td>
<td>Number of people attending events</td>
<td>Number</td>
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<td></td>
<td>Number of helpline enquiries received</td>
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<td></td>
<td>Number of audit visits</td>
<td>Number</td>
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<td>Monitoring data</td>
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<tr>
<td></td>
<td>Number and value of contracts awarded to social partners</td>
<td>Number and Value</td>
<td></td>
<td>Monitoring data</td>
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<tr>
<td></td>
<td>Number and value of contracts awarded to private sector</td>
<td>Number and Value</td>
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<td>Monitoring data</td>
</tr>
</tbody>
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### 2.B.4 Categories of Intervention

**Category of region and Fund**

<table>
<thead>
<tr>
<th>Intervention field</th>
<th>€ amount</th>
<th>€ amount</th>
<th>€ amount</th>
<th>€ amount</th>
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</tr>
</thead>
<tbody>
<tr>
<td>01189   Preparation, implementation, monitoring and inspection</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>012</td>
<td></td>
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<tr>
<td>0119    Evaluation and studies</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>012</td>
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<tr>
<td>0120   Information and communication</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>012</td>
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</tbody>
</table>
Section 3
The Financing Plan.
3.1 Table specifying for each year, in accordance with Articles 53, 110 and 111 of the CPR, the amount of the total financial appropriation envisaged for the support from each of the Funds, identifying the amounts related to the performance reserve (EUR) (Article 87 (d) (i) CPR)

Table 17

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<td></td>
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<td>ERDF in less developed regions</td>
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<td>ERDF in transition regions</td>
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<td>ERDF in more developed regions</td>
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<tr>
<th>ERDF</th>
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</table>
3.2. A financial plan of the operational programme specifying, for the whole programming period, for the operational programme and for each Priority Axis, the amount of the total financial appropriation of the support from each of the Funds and the national co-financing.
### Table 18a: Financial plan of the operational programme

<table>
<thead>
<tr>
<th>Fund</th>
<th>Category of region</th>
<th>National support (a)</th>
<th>National counterpart (b) = (c) + (d)</th>
<th>Indicative breakdown of the national counterpart National Public funding (c)</th>
<th>National private funding (1) (d)</th>
<th>Total funding (e) = (a) + (b)</th>
<th>Co-financing rate (f) = (a)/(e)</th>
<th>For information EIB contributions</th>
<th>Main Allocation: total funding less the performance reserve</th>
<th>Performance reserve</th>
<th>Share of the Performance reserve (Union support) of the total Union support to the priority axis</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 Innovation R&amp;D</td>
<td>ERDF</td>
<td>€</td>
<td>€</td>
<td>€</td>
<td>€</td>
<td>€</td>
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<tr>
<td>P2 SME Competitiveness</td>
<td>ERDF</td>
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<tr>
<td>P3 Renew Energy and Energy Efficiency</td>
<td>ERDF</td>
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<tr>
<td>P4 Connectivity and Sustainable Urban Development</td>
<td>ERDF</td>
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<tr>
<td>P5 Technical Assistance</td>
<td>ERDF</td>
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<td><strong>TOTAL</strong></td>
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</tbody>
</table>
Table 18B: The division of the allocation of the Priority Axis (or part of a Priority Axis) dedicated to the Youth Employment Initiative between ESF and the YEI specific allocation, and between different categories of regions for the ESF

[N/A for ERDF]
Table 18C: Breakdown down of the financial plan of the operational programme by Priority Axis, Fund, category of region and thematic objective for the ERDF, ESF and the Cohesion Fund (Table 18b)

<table>
<thead>
<tr>
<th>Priority Axis</th>
<th>Fund</th>
<th>Category of region</th>
<th>Thematic Objective</th>
<th>Union support (a)</th>
<th>National counterpart (b) = (c) + (d)</th>
<th>Total funding (e) = (a) + (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority Axis 1</td>
<td>ERDF</td>
<td></td>
<td>1 Strengthening research, technological development and innovation</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(4) Supporting the shift to a low-Carbon economy in all sectors</td>
<td></td>
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</tbody>
</table>
| Priority Axis 2 | ERDF | 3 Enhancing the competitiveness of SMEs  
<p>|               |      | 1 Strengthening research, technological development and innovation |
| Priority Axis 3 | ERDF | (4) Supporting the shift to a low-Carbon economy in all sectors |
| Priority Axis 4 | ERDF | (7) Promoting sustainable transport and removing bottlenecks in key network infrastructures |</p>
<table>
<thead>
<tr>
<th>Priority Axis 5</th>
<th>ERDF</th>
<th>Technical Assistance</th>
</tr>
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<tbody>
<tr>
<td>(2) Enhancing access to and exploitation of ICT</td>
<td>ERDF</td>
<td></td>
</tr>
<tr>
<td>(8) Promoting employment and supporting labour mobility</td>
<td>ERDF</td>
<td></td>
</tr>
<tr>
<td>Total Programme</td>
<td>ERDF</td>
<td></td>
</tr>
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</table>
Table 19: The indicative amount of support to be used for climate change objectives.

(This table is generated automatically by SFC based on categorisation tables included under each of the Priority Axes)

<table>
<thead>
<tr>
<th>Priority Axis</th>
<th>The indicative amount of support to be used for climate change objectives (EUR)</th>
<th>Share of the total allocation to the operational programme (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<tr>
<td>Total</td>
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</table>
Section 4
Integrated approach to territorial development – Article 87(3) CPR
1. An all-Wales approach to territorial development is being adopted to the delivery of all ESI funds in Wales, enabling differing territorial development needs to be reflected in the most appropriate way (national, regional, sub-regional or local). The NUTS2 regions do not take into account sub-regional functional economic areas in Wales, such as the city region in South East Wales (which covers Cardiff and Swansea in East Wales and the Valleys in West Wales and the Valleys). Integrated approaches to territorial development irrespective of these boundaries will therefore be actively encouraged. An outline of this approach for all ESI funds is set out in the Partnership Agreement.

2. The Managing Authority will work with projects to identify the most appropriate funding package whilst seeking to maintain an integrated approach (irrespective of the funding source). This will be of particular importance for investments with a clear territorial dimension. Due consideration will need to be given to areas of particular disadvantage, in particular those places set out in Section 5 as suffering from deprivation. The priority for this programme will be for investments to target growth opportunities that can help improve employment prospects not only in the area being supported, but also in those nearby areas with particular issues of poverty.

3. Coordinated investments in key growth centres must be supported through a range of different funding sources to have a genuine impact, therefore funding from this programme will be expected to contribute to holistic integrated territorial strategies (e.g. regional economic strategy or city region strategy). Dedicated support will be expected, in line with the principles for Sustainable Urban Development, under Priority Axis 4 for targeted strategic site development. There will be an expectation that any support for transport infrastructure should also be able to demonstrate clear links to the integrated strategies.

4. A key feature of integrated strategies for sustainable urban development are improvements in connectivity and investing in business, tourism and heritage infrastructure. The aim for investments in the connectivity to and from key urban centres, and in the physical infrastructure offer (for businesses and visitors) within those centres, is to create new territorial opportunities, including inward investment. The challenge is to ensure that investment does not happen in isolation but opens up opportunities for regeneration and encourages greater private sector investment. If coordinated with other activities, an integrated package of support for the regeneration of a place can be underpinned through a single (or small number of) significant investment(s) in physical infrastructure or improved connectivity.

5. Physical infrastructure investments are central elements for sustainable urban development and will be supported under Priority Axis 4. Where such investments are supported through this programme they will be expected to be a prioritised part of an integrated territorial strategy in line
with the principles for Sustainable Urban Development set out in the regulations. Furthermore, they should demonstrate how that investment will complement other initiatives (e.g. skills investments, local labour markets, business support and investment, etc).

6. Given the importance of physical infrastructure and connectivity to the success of urban and regional economies all projects will be expected to demonstrate how they are linking with wider related investments and opportunities (e.g. how are schemes taking advantage of new opportunities arising from electrification of railways or major building programmes).

4.1 Where appropriate, the approach to the use of community led local development instruments and the principles for identifying the areas where it will be implemented

7. The general approach is set out in the Partnership Agreement. No direct support for Community Led Local Development (CLLD) as set out in Article 29 of the Common Provisions Regulation is envisaged for this Operational Programme; however in order to ensure an integrated approach to territorial development direct links will be encouraged between CLLD supported through the EAFRD (under LEADER) and possible investments under the ERDF.

8. The regional coordination and delivery of regional strategies described in the Partnership Agreement will be expected to create links between the CLLD investments made under the RDP (and other community initiatives funded outside of the ESI funding framework) and the opportunities for regional integrated investments under the ERDF. More detail on this is contained in the CLLD section of the Partnership Agreement.

9. It was not felt appropriate to use ERDF alongside EAFRD for CLLD for two key reasons: firstly the strategies for the two funds are different, with EAFRD operating on a local basis and ERDF seeking regionally and nationally significant investment; and secondly because the types of activity supported are very similar across the two funds. The demarcation between the funds is set out in more detail in Section 2 of the Partnership Agreement and Section 8 of this Operational Programme.
4.2 Where appropriate, the support for sustainable urban development - Article 87 (3) (b) CPR and Article 7 (2) and (3) of Regulation (EU) No 10.

10. No ERDF will be used to support sustainable urban development in line with Article 7(2) of the ERDF regulation. The Partnership Agreement sets out how the UK will meet requirements for 5% of ERDF to be spent in this area.

11. Integrated actions supporting sustainable urban development will, however, be supported in the programme area meeting the spirit of the regulations (including the use of strategies, involvement of partners in decisions, and coordinated action). These will not fully comply as it will not be delivered through the use of an entirely separate Operational Programme, Priority Axis, or ITI.

12. We are keen to ensure integrated territorial strategies are not only about securing and spending of EU funds and are therefore looking at encouraging the use of existing economic strategies rather than creating new ones. This should help ensure genuine integration of any supported actions cross-economy rather than just with other ESI funds. For example investment in housing, healthcare, education and inward investment can all be key territorial drivers and would not feature in an approach that focussed solely on spending ESI funds.

13. An approach that encourages regional and urban authorities to consider opportunities, irrespective of ESI programmes, will allow the Managing Authority to allocate funding within the programme area based on opportunity and as part of a portfolio of complementary investments.

14. Our approach is centred on territorial strategies developed outside of the ESI funding context as these will identify specific needs and opportunities without using the ESI programmes as a starting point. Considering which of those key investments are eligible and can contribute the most to the ERDF programme will be central to the role of regional or urban authorities in advising the Managing Authority.

15. We envisage all parts of the ERDF programme being able to support integrated strategies for sustainable urban development. The strategic physical infrastructure investments under Priority 4 will be wholly delivered in accordance with the principles for Sustainable Urban Development as they are key drivers for integrated territorial strategies. There will be significant reductions in the proportion of funding available to invest in this dedicated investment but we still aim to make available around 10-15% of the ERDF programme to help drive this type of regional growth.
Table 20: The indicative amount of the ERDF support for sustainable urban integrated actions under Article 7(2) of Regulation (EU) No [ERDF] and the indicative allocation of ESF support for integrated actions

<table>
<thead>
<tr>
<th>1. Fund</th>
<th>2. Indicative amount of the ERDF support for sustainable urban integrated actions under Article 7(2) of Regulation (EU) No ERDF] and the indicative allocation of ESF support for integrated actions</th>
<th>2. Share of column 2 of the total allocation of the Fund to the operational programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total ERDF</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Total ESF</td>
<td>0</td>
<td>0</td>
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<tr>
<td>TOTAL ERDF+ESF</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

4.3 Where appropriate, the approach to the use of Integrated Territorial Investment (ITI) (as defined in Article 99 of the Common Provisions Regulation) other than urban development undertaken under Article 7 (2) of the ERDF Regulation and their indicative financial allocation from each Priority Axis.

16. At the outset of the programme there is no immediate intention to use Integrated Territorial Investment (ITI) vehicles. At this time it is felt that the same benefits can be achieved through Welsh-designed implementation arrangements that would not require pre-selection of funding allocations or new reporting and monitoring requirements. The Welsh Managing authorities are seeking to ensure greater integration and coordination between all ESI funds in Wales, and as a small country are able to work closely with partners across Wales in delivering integrated territorial investments without needing to put in place new administrative architecture.

17. Regional and urban authorities will be encouraged to use existing planning and coordination mechanisms (for the delivery of existing territorial strategies) to prioritise investments for their territorial areas. The Managing Authority will work with those authorities to help identify the most appropriate ESI funding package, if relevant. For example an integrated package of support might be developed across the ESI funds to support the development of a City Region or Enterprise Zone, but this does not need to be done through an ITI, merely through effective planning and coordination.

18. The Managing Authority will keep this approach under review once implementation begins and early lessons are being demonstrated those regions applying the ITI approach. For example there may be the scope for the two City Regions (Swansea Bay and Cardiff) to develop proposals for ITIs, should there be added value in doing so.
Table 21: An indicative financial allocation to ITI other than those mentioned under point 4.2 (aggregate amount)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Fund</th>
<th>Indicative financial allocation (Union support) (EUR)</th>
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<tbody>
<tr>
<td>Priority Axis 1</td>
<td>ERDF</td>
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<tr>
<td>Priority Axis 2</td>
<td>ESF</td>
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4.4. Where appropriate, the mechanisms to ensure coordination with cooperation activities and macro-regional and sea-basin strategies

*The arrangements for interregional and transnational actions, within the operational programme, with beneficiaries located in at least one other Member State.*

19. A key challenge for the programme will be to more effectively mainstream cooperation actions and achieve better international coordination. This is particularly important for all investments in Research and Innovation – both in the dedicated thematic objective and the Low-Carbon thematic objective. A lack of international partners and networks is a key barrier to Welsh research institutions accessing competitive research funding and needs to be directly addressed in any support provided through this programme. It is expected that the majority of projects supported in these areas through this programme will incorporate some form of transnational activity.

20. There are potentially also opportunities for cooperation activities in the SME Competitiveness and Infrastructure priorities, though less direct action to encourage these will be made. SMEs support, SME finance initiatives and integrated actions for regeneration, sustainable transport and networks should seek to build on international best practice both in terms of spatial planning and technical expertise.

21. Direct links are also being made between this programme and the European Territorial Cooperation programmes in which the programme area participates. There are a number of common objectives, for which complementary funding packages will be sought: in particular objectives for Research and Innovation, Renewable Energy, Low Carbon transition and infrastructure investments of common interest (e.g. Actions to protect the marine environment and exchange best practice at an European level could be co-ordinated with R&I actions to develop marine energy resources).

*Where Member States and regions participate in macro-regional strategies and sea-basin strategies, subject to the needs of the*
programme area as identified by the Member State, the contribution of the planned interventions to such strategies.

22. The UK is incorporated in the Atlantic Strategy and this is described in the Partnership Agreement. Links will be encouraged where opportunities arise in areas of blue growth, and cooperation on research and innovation (particularly that supporting marine energy and the environment and energy Grand Challenge area).
Section 5
Specific needs of geographical areas most affected by poverty or target groups at highest risk of discrimination or social exclusion.
5.1 Geographical areas most affected by poverty/target groups at highest risk of discrimination

1. The Socio Economic Analysis which accompanies this Operational Programme concludes that interventions designed to improve employment and income outcomes are more likely to succeed when focussed on individuals but that carefully targeted initiatives focussed on ‘place’ can also be effective. It suggests that a mix of interventions may be appropriate in West Wales and the Valleys where there are weaknesses in the skills profile of the workforce and areas of physical deprivation which may act to reinforce poor labour market outcomes.

2. Relative income poverty in Wales (defined as households living on 60% or less of the UK median income across different population groups) is broadly similar to that of UK averages, although the percentage of children living in poverty in Wales is currently 31% (2 percentage points above that of the UK average)\(^{135}\).

3. The percentage of the population living in persistent poverty after housing costs (defined as being in relative income poverty for at least three of the last four years) is 11%, slightly higher than in England and Scotland\(^ {136}\).

4. Wales also has a higher percentage of workless households and children living in workless households than UK averages. HMRC data on children living in low income families highlights an acute issue in the South Wales Valleys\(^ {137}\).

5. In addition to poverty, the Welsh Government also monitors levels of deprivation in Wales. Deprivation is a wider concept than poverty. Poverty means not having enough money (or other essentials) to get by. Deprivation refers to problems caused by a general lack of resources and opportunities (not just money). The Welsh Index of Multiple Deprivation 2011 (WIMD) is the official measure of deprivation for small areas in Wales which are called Lower Super Output Areas (LSOAs). Although the geographical size of these LSOAs varies quite widely, and depends on the local population density, the populations are intended to be roughly the same in each, with an average population of 1,500.

6. In WIMD 2011, the most deprived local authority is defined as the authority with the greatest fraction of its LSOAs in the most deprived 10% of all LSOAs in Wales. This method can be seen as identifying the concentration of the most deprived areas in a Local authority, rather than an average level of deprivation.

\(^{135}\) **Family Resource Survey** (2010/11), DWP. Data from 2008/9 to 2010/11

\(^{136}\) Longitudinal data from the British Household Panel Survey and Understanding ‘Society’ Survey

\(^{137}\) **Children in Low-Income Families Local Measure** (2011), HMRC
7. Integrated territorial investments based on functional economic areas will consider links between programme areas (e.g. in the case of City Regions); the summary of most deprived wards below does not, therefore, make a distinction between programme areas. Coordinated and integrated territorial investments should consider the whole picture, not just within statistical boundaries.

8. Areas of the upper valleys have the highest relative concentrations of deprivation across Wales as a whole. This is highlighted in Figure 29 of the Socio economic analysis. Some inner-city wards of Cardiff, Newport and Swansea also suffer from high relative deprivation. This broad picture holds true across 5 of the 8 WIMD deprivation measures, namely income; employment; education; health and community safety.

9. The most deprived local authority is Merthyr Tydfil with 25.0% of its LSOAs in the most deprived 10% in Wales, followed by Blaenau Gwent (23.4%) and Rhondda Cynon Taff (17.8%). Blaenau Gwent has 87.2%, Merthyr Tydfil 77.8% and Rhondda Cynon Taff 73.7% of their LSOAs in the most deprived 50% in Wales.

10. The most deprived local authorities in the income domain are Blaenau Gwent, with 21.3% of its LSOAs in the most deprived 10% in Wales, Cardiff with 21.2% and Merthyr Tydfil with 19.4%.

11. The Equality Impact Assessment, which accompanies this programme, provides a robust assessment of the needs of those who may be at risk of exclusion, disadvantage or discrimination as a result of one or more characteristics protected under the Equality Act (2010) and their specific needs in terms of supporting access to employment and skills. These ‘protected characteristics’ include age (covering all age groups), disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race and ethnicity, religion or belief, sex / gender and sexual orientation.

12. The EIA highlights that groups with characteristics protected under the Equality Act 2010 can face specific issues that impact upon their ability to access and progress within the labour market, and which place them at greater risk of poverty and exclusion. The EIA: also shows that BME groups are disproportionately affected by unemployment138, with ethnicity closely linked to income poverty.

5.2 The strategy of the operational programme to address the specific needs of geographical areas/target groups most affected by poverty

13. The focus of the Welsh ERDF Programmes is to promote economic growth and the creation of sustainable jobs across the programme area. Many of the jobs created will be of relevance to new entrants and returners to the labour market.

14. This is consistent with the Welsh Government’s Tackling Poverty Action Plan which focuses on three areas: Preventing poverty; Helping people into work; and Mitigating the impact of poverty.

15. The approach is complemented by the ESF Programme’s emphasis on providing good quality, affordable childcare and targeted action to help people improve their skills and qualifications, recognising that the best route out of poverty is through employment. The ESF programme will seek to support target groups most affected by poverty and discrimination.

16. Targeting using WIMD data will not be extensively used in the ERDF programme, though it will be expected in relation to activities seeking to help address issues of fuel poverty through improving the energy efficiency of housing. A consideration of deprivation would also be expected in any urban or regional strategy being supported in terms of sustainable urban development under Priority 4.

**Key Tackling Poverty Objectives for the Welsh Programmes:**

- Focus on the creation of jobs and growth providing employment opportunities for those who are out of work. For example through increasing the competitiveness of SMEs

- Tackling barriers to employment. For example addressing poor skills and lack of childcare through the ESF, complemented by addressing transport barriers to accessing employment through the ERDF

- Focusing on growth. For example through support for key knowledge-based sectors through the ERDF, aligned with skills development interventions enabling those experiencing in-work poverty to access more highly-skilled, better paid jobs through the ESF.

17. The UK Partnership Agreement includes details of the approach to tackling poverty across the ESI funds in Wales. The Welsh Government is clear in its expectation that integrated action is needed to promote social inclusion and combat poverty, contributing simultaneously to the 2020 initiative and the Welsh Government’s Tackling Poverty Action Plan.

18. Support under the infrastructure Priority Axis will be targeted at regeneration, creating jobs and improving connectivity in specific geographic areas where deficiencies are often cited as being a barrier to accessing employment. Where possible, projects will be encouraged to link areas of growth opportunity to areas with high incidence of poverty and deprivation.

19. Action to address the energy efficiency of housing will be targeted specifically at those suffering from fuel poverty and the use of WIMD data is anticipated in the design of appropriate targeting mechanisms.
### Table 22: An outline of the contribution of the operational programme to addressing the specific needs of geographical areas/target groups most affected by poverty

<table>
<thead>
<tr>
<th>Target group/ geographical area</th>
<th>Main types of planned actions which are part of the integrated approach</th>
<th>Priority Axis</th>
<th>Investment Priority</th>
<th>Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical area to be decided through consultation</td>
<td>Physical infrastructure improvements to promote local economic growth and jobs.</td>
<td>4</td>
<td></td>
<td>ERDF</td>
</tr>
<tr>
<td>Communities suffering from fuel poverty</td>
<td>Energy efficiency measures which will cut fuel costs for those with low incomes</td>
<td>3</td>
<td></td>
<td>ERDF</td>
</tr>
</tbody>
</table>
Section 6
Specific needs of geographical areas which suffer from severe and permanent natural or demographic handicaps.

[Not applicable for this Programme area]
Section 7
Authorities and bodies responsible for management, control and audit of relevant partners
Authorities and bodies responsible for Management, Control and Audit and the role of relevant partners.

7.1 Identification of the relevant authorities and bodies

Table 23: Identification of and contact details for the relevant authorities and bodies

<table>
<thead>
<tr>
<th>Authority / body</th>
<th>Name of the authority/body, and the department/unit, where appropriate</th>
<th>Head of the authority/body (position or post)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Authority</td>
<td>Welsh European Funding Office (WEFO)</td>
<td>WEFO Chief Executive</td>
</tr>
<tr>
<td>Certifying authority, where applicable</td>
<td>Welsh European Funding Office</td>
<td>Head of Certifying Authority</td>
</tr>
<tr>
<td>Audit authority</td>
<td>European Funds Audit Team (Welsh Government)</td>
<td>Head of Corporate Governance &amp; Assurance (Welsh Government)</td>
</tr>
<tr>
<td>Body to whom payments will be made by the Commission</td>
<td>Strategic Planning, Finance &amp; Performance (Welsh Government)</td>
<td>Director General, Strategic Planning, Finance &amp; Performance</td>
</tr>
</tbody>
</table>

7.2 The actions taken to involve the relevant partners referred to in Article 5 in the preparation of the operational programme, and the role of partners in the implementation, monitoring and evaluation of the operational programme (Article 87(5) CPR)

7.2.1 Role of the relevant partners in the preparation, implementation, monitoring and evaluation of the operational programme

1. The Operational Programme has been developed in partnership with key stakeholders. WEFO, as Managing Authority, has taken the lead and been responsible for compiling the Programme but there has been extensive engagement with partners over the development and content.

2. This has involved a number of specifically appointed Advisory Groups and expert workstreams/working groups together with extensive public engagement over the development period. Membership of each group reflected a full range of stakeholder interests (and those specified in Article 5) from the public, private and third sectors, together with appropriate gender and geographical balance and with equality and environmental interests represented. The various groups are described below with membership details at 12.3.

3. Before embarking upon drafting the Operational Programme the then Deputy Minister for Agriculture, Food, Fisheries and European
Programmes initiated a “Reflections Exercise” which provided stakeholders with an early opportunity to comment on the strategic direction and future investment priorities based on the draft legislative proposals. Partners and stakeholders were generally supportive of the principles underpinning the legislative proposals and the need to align the new programmes with Welsh Government policy objectives to maximise impact. This enabled the Deputy Minister to outline the strategy direction and a number of guiding principles under which the 2014-2020 programmes would be developed in a statement to the National Assembly for Wales on 8 May 2012. These included the need to focus and concentrate resources on areas most likely to have a transformational impact on the Welsh economy and contribute significantly to job creation.

4. Initial work was assisted through the Ministerial Advisory Group on European Programmes, a small task-and-finish group, established to generate ideas and advise Ministers directly on a number of key strategic issues. The members were carefully selected as experts in their field, with the ability and insight to offer the necessary strategic thinking across all programme and policy areas. The group consists of external experts with significant experience and strategic expertise, senior Officials from the main Welsh Government spending departments and advisors offering specialist advice, including senior officials responsible for the development and delivery of European programmes.

5. The European Programmes Partnership Forum was established as the main vehicle for external stakeholder engagement on European funding developments post 2013. The Forum was established in 2011 and remained in operation during the entire programme development period; providing direct input into the formation of both the Operational Programme and Partnership Agreement. The membership was drawn partially from the All-Wales Programme Monitoring Committee (PMC), supplemented with additional partners to ensure that the Forum reflected the interests of all relevant stakeholder groups in Wales. The formation of the group provided a balance of interests and reflected an appropriate level of private sector representation, gender balance, spread across funds, and geographical representation.

6. Four technical workstream groups were established in mid 2012 to consider the technical and operational detail of the 2014 to 2020 programmes and to advise on the content, processes and procedures reflecting Ministerial strategic direction. These covered:

- Operational Programmes
- Delivery and Compliance
- Monitoring and Evaluation; and

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140 http://www.assemblywales.org/bus-home/bus-chamber-fourth-assembly-rop.htm?act=dis&id=233432&ds=5%2F2012#dat4
Territorial Cooperation

7. Members of the Operational Programmes workstream were directly involved in defining the content of the programmes including the direction of the strategy and cross cutting themes (horizontal principles) while members of the Delivery and Compliance and Monitoring and Evaluation workstreams were specifically involved in the consideration and preparation of guidance, indicators and delivery and control arrangements. Members were appointed via invitations for nominations and were selected based on experience of EU funded programmes and relevant EU, UK and Welsh policy, together with relevant subject experience appropriate to each Workstream. A full stakeholder interest, geographical and gender balance was maintained.

8. Finally, to ensure proposals were aligned to Welsh Government policies and strategies a Welsh Government European Programmes Policy Group was established. Policy Group meetings followed those of the Operational Programmes workstream and both groups informed the draft proposals presented for public consultation in early 2013. Members comprised senior level policy representatives nominated by Directors General from all relevant Welsh Government Departments.


10. The consultation was supported by four Welsh Government regional stakeholder events, with over 300 stakeholders attending to discuss the key opportunities and challenges in a series of workshops. A number of external stakeholder groups also organised sectoral events during the consultation period which were attended by WEFO officials.

11. Consultants were appointed to analyse the results of the consultation and their Structural Funds report was published on the WEFO and Welsh Government websites and announced by the Minister of Finance in a statement to the National Assembly for Wales on 9 July 2013. The consultants appointed to analyse the consultation were from the same organisation responsible for the Ex Ante Evaluation and therefore had a detailed understanding of the issues raised.

12. The consultation generated overwhelming support for the Structural Fund proposals both in terms of the investment priorities selected and the importance of concentrating resources in order to achieve a transformational impact. A number of respondents raised concerns about the absence of a discrete Priority relating to tackling poverty and social

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exclusion. The ESF programme has been developed in line with the Welsh Government policy, as articulated within its Tackling Poverty Action Plan, which states that the best route out of poverty is through employment.

13. Actions to address poverty and social exclusion therefore focus on removing barriers to employment and helping people to move onto the employment ladder. With this as the underlying principle, WEFO re-framed actions to support those living in or at risk of poverty and social exclusion to sit within a ‘Tackling Poverty through Sustainable Employment’ Priority Axis supporting these participants to access and retain secure and sustainable employment. This Priority Axis complements the cross-cutting theme on Tackling Poverty and Social Exclusion.

14. A single Wales Programme Monitoring Committee for the 2014-2020 European and Structural Investment (ESI) programmes has been established in shadow form and will be formally be adopted following approval of the programmes by the European Commission.

15. The PMC will cover all three ESI funds managed by the Welsh Government (ERDF, ESF, EAFRD) and will be responsible for approving Structural Funds project selection criteria, examining the progress made in delivering agreed programme objectives, and any modifications to the programmes and agreeing the Evaluation Plan and any modifications to the programmes.

16. The membership of 25 (plus Chair), based on the principles of partnership and many of the best practices set out in the European Code of Conduct on Partnership, consists of 6 expert members appointed via a public appointments process and 19 members nominated on a sectoral basis. Members were drawn from across the private, public and third sectors (including economic and social partners, national, regional and local authorities; and representatives of civil society including environmental and equality bodies). The membership composition was also designed to deliver a broad gender balance and distribution across the two Welsh regions and the urban/rural dimension. Draft terms of reference will be prepared and agreed at the inaugural meeting. This will include detailed guidance on how potential conflicts of interests are addressed.

17. The establishment of a single PMC was supported by our partners on the basis of the feedback received during the public consultation and will facilitate a more holistic assessment of the impact and effectiveness of the funds in delivering the Europe 2020 agenda, set against the Economic Prioritisation Framework and supported by enhanced management and monitoring information.

18. The existing Delivery and Compliance and Evaluation Advisory Groups will remain in operation for the duration of the 2014-2020 to continue to advise on delivery and implementation (including the content of guidance) and monitoring and evaluation arrangements. These groups have been in
existence throughout the 2007-13 programming period and comprise wide internal Welsh Government and external stakeholder interests.

19. The Delivery and Compliance Group (D&CG) is a technical expert group established by the Managing Authority (WEFO) as a forum for partners to feedback implementation and compliance operational issues.

20. The Group’s work informs the work of PMC, and has a specific remit to review WEFO’s regular ‘Compliance Report’ before presentation at the PMC. This includes audit results and common errors found in management verification work. The group supports the PMC to satisfy itself of the effectiveness and quality of the implementation of the Welsh Structural Funds Programmes in the areas of delivery and compliance.

21. The role of the Evaluation Advisory Group is to advise and assist in designing evaluation studies, quality controlling the research final reports and ensuring that findings are disseminated widely. The group will also monitor the implementation of the Monitoring and Evaluation Strategy for the Structural Funds programmes in Wales for the period 2014 – 2020.

22. In the 2007-2013 programme period Technical Assistance has been used to support the engagement of, and developing the capacity of, NGOs and voluntary organisations in the delivery of programmes. This has included the provision of support, information, advice and networking opportunities. It is proposed that similar activities will be possible through Technical Assistance activities within the ERDF programme as described in Section 2.B., these will include:

- Management – further developing the functions and systems of the Managing Authority to deliver integrated sustainable programmes and to provide expert advice and guidance to beneficiaries
- Partnership and Networking – facilitating effective engagement and partnership working with stakeholders in support of programme implementation
- Monitoring – establishing and supporting the single ESI Funds Programme Monitoring Committee
- Research and Evaluation – continuing to deliver quality evidence based information to support programme delivery
- Information and Publicity – highlighting the value added by the EU working in partnership with the Welsh Government and its partners.
- Audit and Control – delivering effective and compliant programmes in Wales
Section 8
Coordination between the Funds, the EAFRD, the EMFF and other Union and National funding instruments, and with the EIB.

1. A description of the areas of complementary activity across the ESI funds and the coordination mechanisms across the ESI funds is set out in the UK Partnership Agreement, in particular within the Welsh Chapter.

2. All ESI programmes in Wales have been designed to be complementary. The two Welsh ERDF programmes share a common analysis, recognising the challenges faced across the whole of Wales, not just the NUTS2 boundaries. The ERDF programmes are mirrors of each other, with the lower levels of funding available in East Wales being reflected in a more concentrated programme. This programme design offers greater opportunities for economies of scale (leading to simplification) and complementarity, whilst still allowing the potential for specific tailored solutions at the sub-regional level.

3. The use of flexibilities or joint funding between the ESI funds (and other domestic, national and EU funds) will be explored on a case by case basis. The project selection and prioritisation criteria will seek to ask every project how they have considered other available funding sources and what links they have made to them. The approach will vary by Priority Axis dependant on the strength of the complementarity. It will also vary by project, reflecting the proportionality principle.

4. This section sets out the links to ESI funds and the other EU funds across the EU and UK by Priority Axis, not seeking to repeat the coordination mechanisms or links to macro-regional strategies set out in the Partnership Agreement.

Research and Innovation

5. Research and Innovation are two elements of the “knowledge triangle”, with education as a third element. ESF investments under the Skills for Growth Priority Axis have the scope to increase the supply of individuals with the specialised skills required to support capacity building in research institutions, increasing the levels of innovation in Welsh business. Very close coordination of these activities will be sought, with the potential for joint funding or the use of flexibility facilities actively encouraged. Proposals will be encouraged that combine Research, Innovation and Skills so that the most appropriate project design and funding package can be discussed. It is important to get the right proposal first and foremost, with the funding following.

6. There is scope for complementarity with the EAFRD programme to promote innovation and the knowledge base in rural areas, and especially through investments under the Grand Challenge area of Low carbon, energy and environment. The anticipated investments supporting the transition to a low carbon economy under this Priority may complement
activity funded under the Fisheries Fund (EMFF), depending on the specialisms supported.

7. A major link is expected with the Horizon 2020 programme and other competitive research funding, such as UK Research Councils, UK Technology and Strategy Board and UK NESTA funding. The ERDF expects to invest in upstream research and innovation with an explicit aim of building capacity in order to increase access to those funds. ERDF will also be used downstream to ensure the outcomes of that research are being exploited and the benefits captured in the programme area.

8. There are a plethora of EU and UK funding instruments seeking to address some of the challenges relating to the transition to a low-Carbon economy. Horizon 2020 will be a key link, but the New Entrants Reserve (NER) 300 demonstration funding will also be promoted and considered when proposals for ERDF low carbon RD&I projects come forward; including any opportunities for joint or complementary funding. There may also be opportunities to support the roll-out of methods and approaches validated under the LIFE programme, where they meet the ERDF programme objectives, for example in demonstrating eco-innovation or adopting innovative technologies.

9. While this implies a demarcation between the funds, the possibility for joint funding will be examined on a case by case basis (a project should meet both the ERDF objectives and the requirements of the other competitive fund). ERDF projects will not substitute for other competitive research funds. Projects will be challenged to ensure they participate in other competitive bidding (e.g. Horizon 2020 or domestic research funds) where that is the most appropriate funding source. The co-location of a Horizon 2020 unit with the Managing Authority for ERDF, coupled with use of expert advice (combination of internal expertise on coordination of external research and innovation funds and external technical expertise) to inform project selection, will help ensure close coordination between these funds.

10. Complementarity also exists with the Marie Curie Actions and linked ERDF proposals will be considered on a case by case basis. Many of the links to ERASMUS and other people-related initiatives will be more directly linked to ESF interventions; nevertheless these will be coordinated with ERDF RD&I investments. This opens up the potential to combine ERDF, ESF and EU finance (H2020, ERASMUS, Marie Curie) towards common goals. No specific action by the Managing Authority is planned to stimulate or target these links, but where links are identified coordination and expert advice will be sought from the policy Department coordinating information on Marie Curie and ERASMUS actions in Wales.

11. All European Territorial Cooperation (ETC) programmes that Wales participates in are expected to feature RD&I as a core element of their programmes. In addition, for the ERDF there will be a presumption that projects seeking upstream support should have a clear international dimension to them. This will be central to achieve a genuine
mainstreaming of transnational activity and to address one of the main barriers for Welsh research institutions accessing competitive research funding (namely a lack of international networks and partners). This is also an opportunity to consider potential links to relevant ETC programmes; where it is hoped that links between research institutions, researchers, networks and successful clusters can be supported.

12. EIB funding as part of ERDF funded projects might be possible should significant investment proposals emerge for research infrastructure. The provision of risk capital for innovative SMEs is likely to be part of a Financial Instrument to which EIB funding may also be sought.

**SME Competitiveness**

13. ESF investments to up-skill the workforce, to address specific skills gaps, and support individuals to become work-ready and in addressing barriers to accessing sustainable employment will support the ability of SMEs to increase their productivity and competitiveness. Support for entrepreneurship skills will also complement the ERDF objective of increasing the number of start-ups. Complementarity will be sought with business advisory services and business start-up activity under the EAFRD and EFF programmes to ensure that services are delivered efficiently and businesses in the farming and fisheries sectors have access to the support services funded through ERDF.

14. The main link with other funding sources will be in the provision of access to finance, where a number of schemes seeking to ease pressures for SMEs are emerging; for example COSME at an EU level or a number of specific loan and venture capital funds supported by the EIF. Domestically the UK Government has sought to encourage financial institutions to invest in SMEs, for example through the Funding for Lending scheme and the Enterprise Finance Guarantee. The UK Government also invests alongside the private sector in commercial funds and is also developing proposals for a Business Bank, to provide finance for SMEs. Venture capitalists and business angels also remain key sources of finance, but tend to be focussed in the South East of England.

15. Coordination with various sources of finance will be sought through existing domestic arrangements for SME support (e.g. the One-Stop-Shop for Business Advice) and the Managing Authority envisages no additional dedicated measures being put in place for ESI schemes. Provision through the ERDF will be subject to assessment of market failure, including consideration other funding sources.

16. There are also links to be made with the European Union Programme for Employment and Social Innovation with measures aimed at entrepreneurship, business creation and tailored delivery of provision for social enterprises; for example the ERDF, alongside ESF, might support the scaling-up of successful innovations aligned to ERDF or ESF objectives.
17. The ETC programmes in which Wales participates are also likely to have strands dedicated to SME Competitiveness. Links will be encouraged between the programmes, particularly where ERDF might support the roll-out or trial of innovative support identified through ETC. Mainstream transnational activity is expected to be limited in this Priority Axis, though there are opportunities in the promotion of growth opportunities (for example in seeking to enter new markets).

18. EIB funding may be sought to support a Financial Instrument providing access to finance for SMEs, as it has for the current JEREMIE fund.

**Renewable Energy and Energy Efficiency**

19. Opportunities to link with the EAFRD and EFF will be actively sought under this Priority Axis; for example there are opportunities for any micro-generation supported by the EAFRD to be complemented through joint support between the EAFRD and ERDF for community or small scale renewable energy schemes. The links with EMFF are expected to revolve around the potential for marine energy, with EMFF measures for marine spatial planning and management complementing ERDF ambitions to support the testing and demonstration of marine energy technology within that marine environment.

20. Support for skills development and identifying any gaps that could be funded by ESF projects will also be an important link; either through ensuring flexibility in mainstream ESF provision to support the energy sector, or through dedicated demand-led skills support.

21. At a UK level funds available include the Green Investment Bank, a range of funds from the Department for Energy and Climate Change, and dedicated funds through the Technology and Strategy Board. A range of legislation and incentives add further complexity to the funding landscape, including the Green Deal and Feed in Tariffs.

22. An assessment of how any project proposal fits within the context of other sources of finance will be essential to demonstrate added value and will feature as part of the project selection and prioritisation process. Expert advice will be sought where market failure or specific opportunity is not clear. This may take the form of internal advice (on alignment with Government policy and instruments) and external advice (technical assessment).

23. In terms of international cooperation there are considerable opportunities in the development of a marine energy sector in West Wales, seeking to add value to similar activity taking place in other areas such as Scotland and Cornwall. The marine environment and marine energy is also expected to feature in the various ETC programmes Wales participates in, and complementarity will be sought with those programmes (recognising that the ERDFD will be the driver of this activity in the main).
24. EIB funding may be sought if the ex-ante assessment on Financial Instruments identifies an opportunity to use repayable finance (e.g. a JESSICA supporting energy efficiency as an element).

**Connectivity and Sustainable Urban Development**

25. Investments in transport, connectivity and physical infrastructure have a key enabling role in the economy and therefore it is important that other investments are co-ordinated to seek maximum impact. There is considerable scope to co-ordinate with the skills and employment measures under the ESF programme in this respect, ensuring that residents are able to take advantage of new opportunities which come as a result of the infrastructure investment (including any inward investment).

26. The key related instrument at an EU level is the Connecting Europe facility. This will be considered as the first port of call for major infrastructure investments of European importance. The issues to be addressed by the ERDF focus on more regional and local barriers contributing to increasing regional disparities; in particular issues of peripherality and lack of connectivity between labour markets and key urban and employment centres. Both areas of investment (Connecting Europe and ERDF) should be mutually reinforcing.

27. There are some significant investments in transport infrastructure in Wales planned during the programme period, for example electrification of the rail line between London and Swansea and electrification of the South Wales Valleys lines. ERDF will seek to add value to those planned investments by seeking to ensure the greatest impact can be achieved through complementary investments e.g. support for regeneration activity where the connectivity of an area has been improved, or ensuring that local connectivity is improved to be able to capture the benefits of the major (non-ERDF) investments more widely.

28. The local and regional impact sought from investments in this Priority Axis limited the international cooperation opportunities, though any areas of best practice or innovation should be considered in scheme design.

29. The importance of infrastructure investments to the Welsh economy, coupled with the lack of resource to support them, has led to the Welsh Government exploring a range of innovative finance mechanism to support those essential investments. Where there are opportunities EIB funding will be sought to co-invest in infrastructure improvements in the programme area.
Section 9
Ex-Ante Conditionalities
### 9.1 Table 24: Identification of applicable ex-ante conditionalities and assessment of their fulfilment

<table>
<thead>
<tr>
<th>Applicable ex-ante conditionality</th>
<th>Priority Axis or axes to which the conditionality applies</th>
<th>Ex-ante conditionalitiy fulfilled: Yes/No/Partially</th>
<th>Criteria fulfilled Yes/no</th>
<th>Reference (reference to the strategies, legal act or other relevant documents, incl. references to relevant sections, articles or paragraphs, accompanied by weblinks or access to full text)</th>
<th>Explanations</th>
</tr>
</thead>
</table>
| 1.1. Research and innovation: The existence of a national or regional research and innovation strategic policy framework for Smart Specialisation, where appropriate, in line with the National Reform Program, to leverage private research and innovation expenditure. | Priority 1 – Innovation R&D | | A national or regional research and innovation strategy for Smart Specialisation is in place that: | **Innovation Wales**
http://wales.gov.uk/topics/businessand-economy/policy/innovationwales/?lang=en

and **Science for Wales**
| | | | – is based on a SWOT analysis to concentrate resources on a limited set of research and innovation priorities; **pg. 9-11 section 3.2, Innovation Wales**; **pg. 32-34 Appendix one, Innovation Wales**; **pg.41-20, Appendix 3, Science for Wales**. | |
| | | | – outlines measures to stimulate private RTD investment; **pg. 21-24, Section 4.3, Innovation Wales**; **pg. 10-14, Section 2.2-2.5, Science for Wales**. | |
| | | | – contains a monitoring and review system. A framework outlining available budgetary resources for research and innovation has been adopted; **pg. 30, Section 5, Innovation Wales**; **pg. 34, Section 6.2 Science for Wales**. | |
| 1.2 The existence of a multi-annual plan for budgeting and prioritisation of investments. | Priority 1 – Innovation R&D | | An indicative multi-annual plan for budgeting and prioritization of investments linked to EU priorities, and, where appropriate, the (European Strategy Forum on Research Infrastructures -ESFRI) has been adopted. | | The Welsh Government allocates finance on an annual basis |
### 2.1. Digital growth: A strategic policy framework for digital growth

A strategic policy framework for digital growth, for instance, within the national or regional innovation strategic policy framework for Smart Specialisation is in place that contains:

- budgeting and prioritisation of actions through a SWOT analysis consistent with the Scoreboard of the Digital Agenda for Europe;
- an analysis of balancing support for demand and supply of information and communication technologies (ICT) should have been conducted;
- indicators to measure progress of interventions in areas such as digital literacy, skills, e-inclusion, e-accessibility, and e-health within the limits of Article 168 TFEU which are aligned with existing relevant sectoral national or regional strategies
- Assessment of needs to reinforce ICT capacity-building.

**Digital Wales**

### 2.2. Next Generation Access (NGA) Infrastructure: The existence of national NGA Plans which take account of regional actions in order to reach the EU high-speed Internet access targets, focusing on areas where the market fails to provide an open infrastructure at an affordable cost

A national and/or regional NGA Plan is in place that contains

- a plan of infrastructure investments based on an economic analysis taking account of existing infrastructure and published private investment plans;
- sustainable investment models that enhance competition and provide access to open, affordable, quality and future proof infrastructure and services;
- measures to stimulate private investment.

**Digital Wales**
and to an adequate quality in line with the EU competition and state aid rules, and provide accessible services to vulnerable groups.

3.1. Specific actions have been carried out to underpin the promotion of entrepreneurship taking into account the Small Business Act (SBA) and its Review of 23 February 2011 including the "Think Small First" principle.

<table>
<thead>
<tr>
<th>Priority 2 – SME Competitiveness</th>
<th>The specific actions include:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>– measures to reduce the cost and time to set-up businesses; <strong>pg. 23-26, The Plan for Growth UK Government (2011)</strong></td>
</tr>
<tr>
<td></td>
<td>– measures to, reduce the time needed to get licenses and permits to take up and perform the specific activity of an enterprise; <strong>pg. 23-26, The Plan for Growth UK Government (2011); Section 1, Reducing regulation made simple UK Gov. (2010)</strong></td>
</tr>
</tbody>
</table>

**The Plan for Growth UK Government (2011)**

**Reducing Regulation made simple UK Government (2010)**

Both publications set out how the UK Government is implementing the Coalition Agreement commitments relating to reducing the regulatory burden on small businesses.
### Priority 3 – Renewable Energy and Energy Efficiency

#### 4.1 Actions have been carried out to promote cost-effective improvements of energy end use efficiency and cost-effective investment in Energy efficiency when constructing or renovating buildings.

<table>
<thead>
<tr>
<th>The actions are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Measures to ensure minimum requirements related to the energy performance of buildings required consistent with Article 3, Article 4 and Article 5 of Directive 2010/31/EU.</td>
</tr>
<tr>
<td>- Measures necessary to establish a system of certification of the energy performance of buildings in accordance with Article 11 of Directive 2010/31/EU;</td>
</tr>
<tr>
<td>- Measures consistent with Article 13 of Directive 2006/32/EC on energy end-use efficiency and energy services to ensure the provision to final customers of individual meters in so far as it is technically possible, financially reasonable and proportionate in relation to the potential energy savings.</td>
</tr>
</tbody>
</table>

#### 4.2 Actions have been carried out to promote high-efficiency co-generation of heat and power.

<table>
<thead>
<tr>
<th>The actions are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Support for co-generation is based on useful heat demand and primary energy savings consistent with Article 7.1 pg. 9-12 The Renewable Heat Incentive, and</td>
</tr>
<tr>
<td>9.1(a) and (b) of Directive 2004/8/EC, Member States or their competent bodies have evaluated the existing legislative and regulatory framework with regard to authorisation procedures or other procedures in order to:</td>
</tr>
<tr>
<td>- a) encourage the design of co-generation units to match economically justifiable demands for useful heat output and avoid production of more heat than useful heat; and pg. 51 onwards, The Renewable Heat Incentive.</td>
</tr>
<tr>
<td>- b) reduce the regulatory and non-regulatory barriers to an increase in co-generation. chapter 8, The Renewable Heat Incentive.</td>
</tr>
</tbody>
</table>

#### 4.3 Actions have been carried out to promote the production and distribution of

<table>
<thead>
<tr>
<th>The actions are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparent support schemes, priority in grid access or guaranteed access and priority in dispatching, as well as standard rules relating to the bearing and sharing of costs of technical adaptations which have been made public are</td>
</tr>
</tbody>
</table>

**Energy Performance Certificates**

**EPC for commercial property**

**Climate Change Strategy for Wales**

**The National Energy Efficiency and Savings Plan**

**Energy Performance Certificates are a requirement in Wales when a building is rented out, sold or renovated.**

**The Renewable Heat Incentive**

**The UK Governments Renewable Heat Incentive (RHI) is available to business, and soon will be for domestic property, to encourage owners, through subsidy, to generate renewable heat or hot water.**

**Energy Wales: a low carbon revolution (2012)**

**“A low carbon revolution” – the Welsh Governments**
<table>
<thead>
<tr>
<th>renewable energy sources</th>
<th>Efficiency</th>
<th>Energy policy statement sets out the Welsh Governments agenda around energy efficiency, moving to renewable generation and the creation of low carbon jobs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Priority 3 – Renewable Energy and Energy Efficiency</strong> <strong>A national or regional risk assessment with the following elements shall be in place:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>– A description of the process, methodology, methods and non-sensitive data used for risk assessment as well as of the risk based criteria for the prioritisation of investment;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– A description of single-risk and multi-risk scenarios;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Taking into account, where appropriate, national climate change adaptation strategies.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>North Wales Community Risk Register</strong> <strong>Dyfed-Powys Community Risk Register</strong> <strong>South Wales Community Risk Register</strong> <strong>Gwent Community Risk Register</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Under the UK Civil Contingencies Act (2004) there is a duty for responders to keep risk registers. The Welsh Government is also involved in creating these. In Wales there are four registers, one for each Local Resilience Forum.</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>– A Member State has ensured contribution of the different water uses to the recovery of the costs of water services by sector consistent with Article 9, paragraph 1, first indent of Directive 2000/60/EC having regard, where appropriate, to the social, environmental and economic effects of the recovery as well as the geographic and climatic conditions of the region or regions affected.</td>
</tr>
</tbody>
</table>
adequate contribution of the different water uses to the recovery of the costs of water services at a rate determined in the approved river basin management plan for investment supported by programmes.

| 6.2. Waste sector: Promoting economically and environmentally sustainable investments in the waste sector particularly by the development of waste management plans consistent with Directive 2008/98/EC on waste and, with the waste hierarchy, | N/A | The existence of one or more waste management plans as required by Article 28 of Directive 2008/98/EC.
- A Member State has established, consistent with Articles 1 and 4 of Directive 2008/98/EC, waste prevention programmes, as required by Article 29 of the Directive;
- Necessary measures to achieve the target on re-use and recycling by 2020 consistent with Article 11 of Directive 2008/98/EC have been adopted. |

| 7.1. Road: The existence of a comprehensive plan(s) or framework(s) for transport investment in accordance with the Member States’ institutional set-up (including public transport at regional and local level) which supports infrastructure development and improves connectivity to the TEN-T | Priority 4 - Connectivity and Sustainable Urban Development | The existence of a comprehensive transport plan(s) or framework(s) for transport investment which fulfils legal requirements for strategic environmental assessment and sets out:
- The contribution to the single European Transport Area consistent with Article 10 of Regulation No. [TEN-T], including priorities for investments in the core TEN-T network and the comprehensive network where investment from the ERDF and CF is envisaged; and secondary connectivity. pg.16 - The National Transport Plan,
- A realistic and mature project pipeline for projects envisaged for support from the ERDF and CF. Details of pipeline projects are outlined in sections 3, 4 & 5 of the National Transport Plan. |

Yes | The Wales Transport Strategy And The National Transport Plan | The Wales Transport Strategy is an overarching document supported by the National Transport Plan which lays out detailed plans up until 2015. This in turn is supported by regional plans.
comprehensive and core networks.

| 7.2. Railway: The existence within the comprehensive transport plan(s) or framework(s) of an explicit chapter on railway development which sets out priorities of investments in the core Trans European Network of Transport Infrastructure (TEN-T) network, in the comprehensive network (investments other than the core TEN-T) and in secondary connectivity of the railway system according to their contributions to mobility, sustainability, national and European wide network effects. The investments cover mobile assets and interoperability and capacity building. | Priority 4 - Connectivity and Sustainable Urban Development | The existence of a section on railway development within the comprehensive transport plan(s) or framework(s) which fulfils legal requirements for strategic environmental assessment and sets out a realistic and mature project pipeline (including a timetable, budgetary framework). | The Wales Transport Strategy | The Wales Transport Strategy is an overarching document supported by the National Transport Plan which lays out detailed plans up until 2015. This in turn is supported by regional plans. | The National Transport Plan | pg.53 - The Wales Transport Plan | - Measures to ensure the capacity of intermediary bodies and beneficiaries to deliver the project pipeline. | - Measures to strengthen capacity of intermediary bodies and beneficiaries to deliver project pipeline. | pg.53 - The Wales Transport Plan |
9.2 A description of the actions to fulfil the ex-ante conditionalities, the responsible bodies and a timetable for such actions (tables 25 and 26)

Table 25: Actions to be undertaken to fulfil applicable general ex-ante conditionalities

Note: these are covered in the UK Partnership Agreement

Table 26: Actions to be undertaken to fulfil applicable thematic ex-ante conditionalities

<table>
<thead>
<tr>
<th>Applicable thematic ex-ante conditionalities which are completely unfulfilled or partially unfulfilled</th>
<th>Criteria not fulfilled</th>
<th>Action to be undertaken</th>
<th>Deadline (date)</th>
<th>Bodies responsible for fulfilment</th>
</tr>
</thead>
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Section 10
Reduction of the administrative burden for beneficiaries
Reduction in the Administrative Burden for Beneficiaries

1. Significant progress was made in reducing the administrative burden for sponsors under the 2007-13 programmes. This has involved the introduction of new working procedures around the introduction of the PPIMS IT system which led to the harmonisation of processes across structural funds and enables beneficiaries to input project data directly via a web based portal. This has resulted in common processes, the improved exchange of documentation together with efficiency gains and quicker processes and payments to beneficiaries. The current round of programmes has also seen the establishment of the Project Development Officer model. This has involved a single officer as a primary point of contact for project sponsors throughout the application, development and post approval stages.

2. A customer insight survey was undertaken by WEFO in 2009 which sought the views of project sponsors on administrative procedures and processes involved in applying for and managing EU projects. There was general support for efficiencies resulting from many of the web based improvements introduced for the 2017-13 funding round together with support for the concept of the Project Development Officer. Some concerns were raised over the bureaucracy involved in applying for funding (decisions could be made earlier involving less form filling) and over the accessibility and technical language in some of the guidance.

3. The Welsh Government is building upon previous developments and addressing feedback from project sponsors for the 2014-2020 programmes by maximising integration and harmonisation opportunities wherever possible in order to assist delivery and further reduce the burden for beneficiaries.

4. This will include a streamlined application and assessment process involving a series of gateways and decision points over the eligibility of projects together with further enhancements to PPIMS. This will include a single online gateway for potential projects to access all ESI funds, which will direct potential projects to a specific thematic objective team and facilitate the selection of the optimal funding instrument(s) and delivery mechanism, whilst respecting the demarcation lines between funds.

5. Harmonised ESI national eligibility rules and common supporting guidance will be in place for all organisations in Wales receiving funds from ERDF, ESF and the EAFRD, other than where eligibility rules have been determined by fund-specific EC legislation. This will represent a significant simplification for beneficiaries in Wales and builds on the Commission’s common eligibility provisions in the Common Provisions Regulation for matters such as durability, revenue generation, and simplified cost options.

The harmonised eligibility rules will be agreed and published and easily accessible via the WEFO website in 2013.

6. In addition, Wales intends to encourage the take-up of simplified cost reimbursement options (lump sums, flat-rates, unit costs) by making all legislative options available to potential applicants, issuing detailed guidance, and running training workshops with representatives from key sectors to understand and address the barriers to take-up. It is expected that flat-rate costs in relation to reimbursement of indirect costs will be of particularly interest to Welsh beneficiaries. The extent of the shift towards a more results-based reimbursement system (lump sums, unit costs) will also depend on the provisions of the cohesion policy legislative package, the suitability of the EC standard rates, and the implementation guidance from the Commission. This is however, unlikely to include the use of Joint Action Plans which are not considered suitable in Wales.

7. Welsh projects will also benefit from a reduction in administration by Welsh Government implementing in full the EC simplification measures, such as shorter document retention periods, flat-rate revenue generation calculations, and protecting projects against duplication of audit activity from both the Audit Authority and European Commission in the same year.
Section 11

Horizontal principles
11.1 Sustainable development

1. The Welsh Chapter of the UK Partnership Agreement provides an overview of the approach to promoting the horizontal principles across the ESI funds in Wales which includes the Sustainable Development Cross Cutting Theme (CCT). It also outlines the main Welsh Government organising principles and objectives for sustainability which provide the basis for the implementation of the CCT within the ESF Programmes in Wales. The Partnership Agreement also describes the progress towards related environmental sustainability targets and other parts of this programme describe some of the vertical actions contributing to them (e.g. support for renewable energy and energy efficiency).

2. In terms of environmental sustainability, *Sustaining a Living Wales*’ is the Welsh Government’s new approach to natural resource management in Wales and is based on the ecosystem approach. An ecosystem being defined as all the living things, in an environment, including their interactions, with each other and their environment.

3. This ERDF Programme will contribute to the achievement of environmental sustainability goals as follows:

- Promoting research and innovation in the Grand Challenge area of low carbon, energy and environment, building on the significant investments made in this area under the 2007-2013 programmes

- Developing the low carbon, energy and environment sector through business advice and support and business finance under the SME Competitiveness Priority

- Promoting resource efficiency, including energy efficiency, through interventions under the SME Competitiveness Priority

- Increasing the potential to generate renewable energy through support for R&I, and enabling infrastructure investments in the Marine Energy industry in Wales

- Increasing the number of small scale and community renewable energy projects

- Improving the energy efficiency of Welsh Homes, in particular in areas of particular fuel poverty and deprivation (as measured by WIMD)

- Promoting low carbon energy schemes for urban and rural areas

- Supporting low carbon and sustainable transport solutions, including through linking unemployed and economically inactive individuals with work and training
4. In addition, the following actions will be taken in the selection and development of operations under this Programme to ensure that environmental protection requirements, resource efficiency, climate change mitigation and adaption, disaster resilience and management:

- Targets will be set at Priority Axis level providing an important driver to ensure that projects address the programmes cross cutting theme objectives
- Cross cutting theme assessment at all stages of project development
- Ongoing specialist advice will be made available to projects from WEFO and through arrangements being developed for the implementation of projects. A key objective will be to provide the specialist input at an early stage in the process to maximise take-up of the opportunities to promote the cross cutting themes
- A programme of awareness raising and training will be provided to WEFO staff and project sponsors on the benefits of, and best practice in, integrating the cross cutting themes
- Activity level guidance will be prepared together with best practice case study examples that will provide specific information on how sponsors can address the cross cutting themes within their project plans
- Regular monitoring of progress, through ‘forecast’ data (the targets set by projects at the outset) and ‘actual’ achievement (what projects actually achieve monitored through the quarterly return system), allowing for early intervention if necessary
- Update reports to PMC and other stakeholders
- WEFO will encourage key equality, social inclusion and sustainable development organisations to be involved in an attempt to establish an effective network of specialist support
11.2 Equal opportunities and non-discrimination

5. The integration of equal opportunities, gender mainstreaming and the Welsh language (which we also include in the Equal Opportunities CCT) is important not only for legal reasons, but also because different social and demographic sections of society in the labour market contribute to the overall effectiveness of the activity delivered by the programmes.

6. The Welsh Government launched its Strategic Equality Plan (2012-16) and equality objectives on 2 April 2012. These highlight how the Welsh Government is fulfilling its legal obligations as well as its strong commitment to equality and inclusion. The Strategic Equality Plan was developed in-line with the general duties under the Public Sector Equality Duty (PSED) of the Equality Act 2010. The PSED states that public authorities must have due regard to the need to:

- Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited under the Act
- Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

7. An Equality Impact Assessment (EIA) has been undertaken to assess potential impacts of the ERDF programmes on people with different socio-demographic characteristics. The EIA supports the compliance of the Welsh Government with the PSED by providing evidence on the potential effects of the programme on people with the nine protected characteristics:

- Age
- Disability
- Gender Reassignment
- Marriage and Civil partnership
- Pregnancy and Maternity
- Race and Ethnicity
- Religion and Belief
- Sex / Gender
- Sexual Orientation

8. The report concludes that the process for the development of the 2014-2020 ERDF programmes for Wales has included extensive consideration of equality and because of this it is highly unlikely that there will be any disproportionate negative impacts on any of the characteristics protected under the Equality Act and will support the Welsh language as required by the 2006 Government of Wales Act.

9. Key equality objectives for the ERDF programme in Wales are to:
• Encourage entrepreneurship and business start-up initiatives to encourage more take up from young people, women, Black and minority ethnic people, disabled people and LGBT people

• Support the creation of an environment which supports inclusive workplaces and promotes equality of opportunity for staff, including reconciliation of work and private life

• Ensure access to technology is available and accessible to all, particularly for people in rural areas, older people and others affected by the ‘digital divide’

• Support RD&I which seeks to address societal challenges, such as supporting active ageing, opening up employment and training opportunities for individuals and supporting independent living

• Support access for disabled people and those from BME backgrounds to training and employment opportunities, including through sustainable transport solutions

• Identify and support opportunities to promote and facilitate the use of the Welsh language

10. The UK Partnership Agreement includes details of the approach to promoting the horizontal principles across the ESI funds in Wales.

11. Specific to this Programme, the following actions will be taken in the selection and development of operations to promote equal opportunities and prevent any discrimination based on the nine protected characteristics outlined above:

• On-going specialist advice will be made available to projects by the Welsh Government and through arrangements being developed for the implementation of projects. A key objective will be to provide the specialist input at an early stage in the process to maximise take-up of the opportunities to promote gender mainstreaming and equal opportunities

• A programme of awareness raising and training will be provided to Welsh Government staff and project sponsors on how to integrate equal opportunities objectives

• Activity level guidance will be prepared together with best practice case study examples that will provide specific information on how sponsors can address gender mainstreaming and equal opportunities within their project plans

• Regular monitoring of progress, through ‘forecast’ data (the targets set by projects at the outset) and ‘actual’ achievement (what projects
actually achieve monitored through the quarterly return system), allowing for early intervention if necessary

- Update reports to PMC and other stakeholders
- Welsh Government will encourage key gender mainstreaming, equality and social inclusion organisations to be involved in an attempt to establish an effective network of specialist support

11.3 Equality between men and women

12. The Welsh Government’s Gender Equality Scheme sets out it plans to promote equality of opportunity for women and men in Wales.

13. Although the Welsh Government has no specific duty to produce a Gender Equality Scheme it wants to be recognised for providing an exemplary service to women and men in Wales by developing strategies and policies that are effective and outcome focused.

14. Key gender equality objectives will primarily be addressed through the ESF programmes. The ERDF programmes will be able to complement this activity through:

- Supporting the competitiveness of the childcare sector where it meets the objectives of the related Priority Axis
- Support the creation of an environment which supports inclusive work places, which promotes equality of opportunity for staff, including the reconciliation of work and private life
- Encourage entrepreneurship and business start-up initiatives to encourage more take up from women

15. The UK Partnership Agreement includes details of the approach to promoting the horizontal principles across the ESI funds in Wales.

16. Specific to this Programme, the following actions will be taken in the selection and development of operations to promote equality between men and women are as set out in section 11.2.