



# National Evaluation of English ERDF Programme 2014-20:

Phase Two Report: Interim Impact Evaluation

January 2021

Hatch Regeneris Consulting
The Ministry of Housing, Communities & Local Government

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#### **Foreword**

This report presents the main findings from Phase 2 of the national evaluation of the 2014-2020 European Regional Development Fund (ERDF) programme in England. Phase 1 comprised a process evaluation of the ERDF programme, which took place in 2019. Phase 2 of the evaluation comprises an interim evaluation of the programme. Phase 3 of the national evaluation will cover the final economic and impact evaluation and will conclude in 2022.

The Interim Evaluation, undertaken during 2020, focused on the emerging evidence of the economic outcomes and impacts which had started to be realised through the delivery of ERDF projects across England. The report provides evidence up to the end of 2019, although a snapshot of delivery performance for the programme is provided up to Quarter 3 2020. Consequently, it is setting out the picture in terms of emerging economic impacts that the ERDF programme was beginning to achieve prior to the Covid-19 lockdown in mid-March 2020.

The study's findings are based on desk-based analysis; consultations with Ministry for Housing, Communities and Local Government (MHCLG) - now Department of Levelling Up, Housing and Communities (DLUHC) - policy and delivery staff; a review of approximately 80 project-level evaluations known as summative assessments; interviews with around 4,200 businesses who have received support from the programme; and counter-factual impact analysis.

The department would like to thank Hatch Regeneris, Belmana, and BMG Research for their work on the evaluation; as well as the stakeholders who participated in the research, and the policymakers, operational delivery colleagues, and analysts in the department who provided input to the research materials and reviewed the outputs.

Whilst the national evaluation of the ERDF programme was commissioned to meet a regulatory requirement, the department welcomes the findings of the report which will feed into the ongoing continuous improvement of programme delivery, and which captures lessons learned for the development of successor domestic funds.

The department is committed to robust policy and programme evaluation and continues to develop its evidence base in this area of regeneration with a view to informing the many new initiatives being implemented to deliver the Government's Levelling Up agenda.

Stephen Aldridge Chief Economist & Director for Analysis and Data Department for Levelling Up, Housing and Communities This page is left intentionally blank

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# 1. Executive Summary

- i. This Phase 2 has focused on the emerging evidence of the economic outcomes and impacts which are starting to be realised through the delivery of the ERDF projects across England. The evaluation provides evidence up to the end of 2019, although a snapshot of delivery performance for the programme is provided up to Quarter 3 2020. Consequently, phase two of the evaluation is setting out the picture in terms of emerging economic impacts that the ERDF programme was beginning to achieve prior to the Covid-19 lockdown in mid-March 2020.
- ii. In terms of headline **financial and output performance**, the programme has made good progress against key targets overall and progress against lagging targets is now strengthening.
- iii. The initial review of project evaluations (summative assessments) has provided early insight into the lessons from mostly SME competitiveness, local innovation and low carbon growth projects. Whilst still early in terms of this analysis, key emerging lessons include:
  - the value of building on previous project experience and structures (in terms of efficient delivery) where appropriate.
  - building in a "phase 0" preparatory phase, into delivery timescales.
  - the benefit of streamlining and simplifying delivery processes for business support.
  - the value of using research to understanding business needs and engaging early with them.
  - providing clarity on the support offer and pathway for supported businesses.
- iv. The review also pointed to a range of shortcomings in the coverage and quality of the summative assessments submitted to MHCLG by grant recipients, especially related to the assessment of economic impacts and value for money provided by ERDF grant. MHCLG has strengthened its guidance to projects as a consequence.
- v. The **survey of 4,400 beneficiaries**, although not covering the recipients of all support types, findings are positive overall:
  - Projects have been able to provide the forms of research and business support that beneficiaries felt they required.
  - Beneficiaries in general reported making good progress in addressing obstacles and progressing towards their goals because of support.
  - Beneficiaries reported reasonable levels of additionality arising from support, with the vast majority finding that support played at least some role in overcoming barriers or progressing against goals.
  - For most businesses supported, there has been an increase in employment at the time of the research averaging over 1 FTE employee per business in

gross terms following support, generally this increase is higher for SMEs accessing grant and repayable finance and lower for start-up businesses.

- vi. The phase 2 **counterfactual impact analysis** has provided the initial assessment of the additionality of the ERDF funded support focussed on business support delivered mainly through SME competitiveness, local innovation and low carbon growth elements of the programme. For the analysis 30,600 beneficiary businesses were successfully matched to comparable businesses that have not been supported.
- vii. This analysis suggests there has been an increase in the employment amongst these beneficiary businesses of 34,000 gross jobs post-support and of these it is estimated that 16-38% of jobs were additional i.e., would not have been achieved without the support.
- viii. A second CIE approach tested in phase 2 has focused on area-based interventions, including investment in research facilities, incubator and workspace schemes, broadband infrastructure and flood defence schemes (in total, 100 projects with an ERDF grant value of £247m). Using spatial and time-differencing methods, the analysis suggests that an upper bound estimate of 15,500 jobs can be attributed to the investments in the time period covered. This potential additional source of employment creation is not captured in the programme monitoring data.
- ix. **Phase 3 of the evaluation** is due to commence in 2022 and will aim to strengthen the evidence base in order to more fully answer the research questions in three main areas:
  - reviewing a much larger and more comprehensive range of project level summative assessments across priority axes (reviewing c300 additional summative assessments);
  - providing more statistically robust and representative survey evidence gathered from larger surveys of direct programme beneficiaries;
  - undertaking comprehensive analysis of beneficiary SMEs using a larger sample of firms, improved matching into the ONS's BSD datasets and a longer period of post-support data, as well as additional forms of area based counterfactual analysis to test the impact of selected infrastructure investments.
- x. The three strands of activity will help to improve the evidence relating to the experiences of beneficiaries and the effectiveness, impact and value for money across the programme's specific objectives, priority axes and investments priorities. It will also provide a basis for more extensive sub-national analysis for the main programme activities.
- xi. MHCLG and the evaluation team have worked closely together during Phase 2 to improve the quality of the summative assessment, monitoring systems and data reporting in order to ensure the full value of this analysis can be achieved.

- xii. A number of **recommended actions** related to the delivery of the programme are presented in Appendix F. The recommendations revolve around the following themes:
  - MHCLG considering the implications for future investment programmes for the delivery of the intervention types locally which have faced more delivery challenges during this investment period (for example, local low and zero carbon economic transition measures, where there have been issues related to eligibility, overlaps with national schemes and insufficient development capacity)
  - MHCLG continuing to monitor the contracting and delivery challenges which the programme is facing due to the impacts of Covid-19 so that its lifetime targets can be met, and anticipated impacts achieved
  - A number of actions to strengthen the programme monitoring and summative assessment evidence which will be available as part of phase 3.

# 2. Introduction

2.1 The report presents the main findings from phase two of the national evaluation of the England 2014-2020 European Regional Development Fund (ERDF). The programme has an overall ERDF allocation of £3.2bn (and estimated match funding of £2.5bn) and covers ten Priority Axes¹ (including one for technical assistance). As shown in Table 2.1, the vast majority of the ERDF allocation (84%) is allocated to just three priorities focused on promoting research and innovation (Priority Axis One), enhancing the competitiveness of SMEs (Priority Axis Three) and supporting the shift to the low carbon economy (Priority Axis Four). The Priority Axes focused on ICT (PA2), climate change adaptation (PA5), protecting the environment (PA6) and promoting social inclusion (PA8) have relatively modest allocations. Priority Axis 7 is specific to sustainable transport in Cornwall and the Isles of Scilly, which is the only less developed region in England.

Table 2.1 ERDF Allocation by Priority Axis				
Priority Axis	Notional Allocation (£million)			
PA 1: Research and Innovation	727.5			
PA 2: ICT	100.5			
PA 3: SME Competitiveness	1,415.3			
PA 4: Low Carbon Economy	685.3			
PA 5: Climate Change Adaption	74.3			
PA 6: Protecting the Environment	77.6			
PA 7: Sustainable Transport in Cornwall and IoS	52.3			
PA 8: Promoting Social Inclusion	32.4			
PA 9: Technical Assistance	131.1			
Total	3,296.4			

Source: MHCLG, Performance Pack, January 2020; note: figures may not sum due to rounding; exchange rate: 0.9033

- 2.2 The ERDF programme is focused on a wide range of types of investment across the Priority Axes and Investment Priorities (of which there are nineteen and a slightly larger number of Specific Objectives). More than 1,000 projects are expected to be grant funded during the life of the programme, supporting a mix of direct and indirect beneficiaries. Many of the direct beneficiaries will have received advice, guidance or finance often associated with setting up or improving the competitiveness of businesses, whilst a range of supporting investments will indirectly support a range of beneficiaries and help contribute to enhanced local economic growth in a variety of ways.
- 2.3 The evaluation plan for the ERDF 2014-20 Operational Programme for England states that the purpose of the evaluation is to "test and understand a) the process of implementation and delivery of the projects funded through the ERDF programme and b) if and how this has directly resulted in the intended outcomes and impacts." The evaluation plan also sets out the theory of change for the programme which in turn has helped to shape the structure and approach of the evaluation. This sets out

<sup>&</sup>lt;sup>1</sup> A tenth priority was introduced in August 2020 in response to the economic challenges arising from the Covid-19 pandemic.

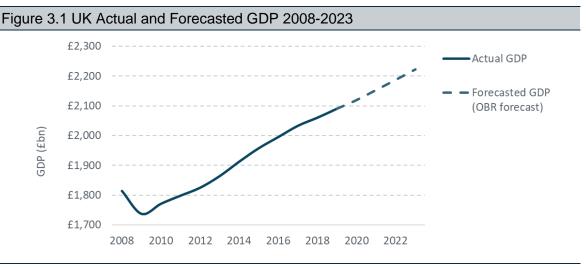
- the relationship between economic and policy context, rationale for intervention and programme design, activities and outputs, impacts and economic change (the results).
- 2.4 Phase 2 of the national evaluation, undertaken during 2020, focuses on assessing the emerging outcomes, impacts and lessons from the delivery of these investment activities across England. In order to provide the necessary context where appropriate, it also considers the progress in delivering the programme and some of the key economic and policy changes which have occurred.
- 2.5 The main research methods used to inform phase 2 have been:
  - Desk Based Analysis analysis of economy, policy and programme performance.
  - Consultations selective use of consultations to improve our understanding of programme delivery and management, mainly focused on MHCLG delivery and policy staff. Covering a range of programmes and priorities.
  - Review of Project Summative Assessments reviews of around 80 project summative assessments to provide bottom-up evaluation evidence, focused mainly on projects receiving grant funding through on Priority Axis 1, 3 and 4 due to higher spend and greater progress here.
  - Beneficiary Surveys sample surveys of business beneficiaries (c4,200 interviews in total) receiving business start-up, SME competitiveness, research and innovation and resource efficiency type support.
  - Counterfactual Impact Analysis analysis of the performance of businesses employers above the VAT threshold receiving ERDF support compared to matched non-treatment businesses. Around 66,400 business beneficiaries were captured through monitoring systems, although the number included in the analysis was lower than this following data cleaning and matching processes.
- 2.6 Appendix A provides a fuller discussion of the evaluation objectives and the respective research methods.

# 3. Change in Economic Context

- 3.1 This section considers the economic context in which the ERDF programme has been implemented to date, how this has changed and the implications for both programme delivery and expected economic impacts. The update highlights the emerging economic consequences of the Covid-19 pandemic, as well as the departure of the UK from the European Union in January 2020 and the ongoing trade negotiations.
- 3.2 Given the focus of the Phase 2 report on the period up to the end of March 2020, the analysis does not focus on these major developments in detail. However, Covid-19 in particular has major implications for the delivery of the ERDF programme and will need to be considered in detail as part of Phase 3.

### **Recent Economic Performance**

3.3 The period covered by this phase of the evaluation (2014 up to the end of 2019) has been characterised by slow but steady economic growth. Whilst the UK economy has grown steadily following its emergence from recession in 2010/11, the rate of growth slowed in the latter half of the decade (e.g., c1% annual growth rate in 2019 compared to c2% in the earlier part of the decade). The Office for Budget Responsibility's (OBR) pre-pandemic GDP growth forecasted<sup>2</sup> growth of 1.4% in 2020 and 1.6% per annum from 2021 to 2023 (see Figure 3.1).



Source: ONS, 2020 & OBR, 2020

3.4 Although less relevant for evaluation presented in this report, the Covid-19 pandemic has already had a major impact on the UK economy and its consequences are likely to be picked up in the results of the phase 3 evaluation. The UK's total GDP in Q2 2020, at £408bn³, fell by 20% compared with the previous

<sup>&</sup>lt;sup>2</sup> OBR, The Economy Forecast, Real GDP Growth, April 2019

<sup>&</sup>lt;sup>3</sup> ONS, 2020, Gross Domestic Product: chained volume measures: Seasonally adjusted £m

- quarter. The EY ITEM Club's July 2020 forecast predicted GDP to fall by 11.5% over the whole calendar year, but improve in 2021, growing by 6.5%, before returning to a longer term trend of c1.6% annual growth. EY do not expect the 2019 level of GDP (c£2,100bn) to be achieved until 2024.
- 3.5 The OECD Business Confidence Index (see Figure 3.2) tracks the confidence of UK businesses over time<sup>4</sup> based on the findings of business opinion surveys. An index value above 100 indicates increased confidence in near future business performance and below 100 indicates increased pessimism. In May 2019 the index dropped below 100 for the first time since 2013. Towards the end of 2019, business confidence stabilised around a value of 99, before falling again (due to the emergence of the pandemic and the Covid-19 restrictions which were put in place to combat it).

Figure 3.2 UK Business Confidence Index (monthly, January 2014 to August 2020)

Source: OECD, 2020

- 3.6 The UK has experienced strong employment growth since the end of the last recession, with the employment rate increasing from 70.2% in 2010 (January to March) to 72.5% in 2014 (January to March) before reaching 76.5% at the end of 2019 (October to December)<sup>5</sup>. The underpinning jobs growth has been driven by the recovery from the previous recession, as well as the strong growth across sectors and the economic geographies of the UK. The job growth has been dispersed across the UK, although rural areas have tended to fair else less well. Although the growth of employment in the 'gig economy' has been a feature of the growth especially in the earlier part of the decade, it has been much more broadly based than this.
- 3.7 The growth in employment is mirrored in the fall in unemployment across the UK (see Figure 3.3), amongst men and women and different age groups. The unemployment rate fell from 8% at the start of 2010 (January to March) to 6.8% in

<sup>&</sup>lt;sup>4</sup> OECD data, 2020, Business Confidence Index

<sup>5</sup>https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/employmentintheuk/nove mber2020#employment

2014 (January to March) and 3.8% at the end of 2019 (October to December). The level of unemployment has risen rapidly due to the impact of Covid-19 restrictions, increasing to 4.8% in mid-2020 and likely to increase further as businesses lay off more workers (although the impact of the changes to the Government's furlough scheme is not yet clear).

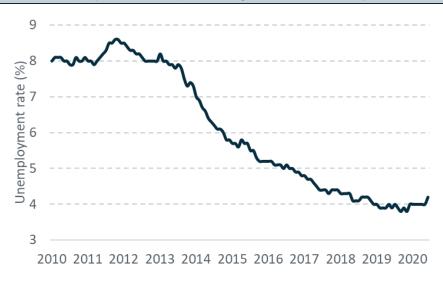


Figure 3.3 UK Unemployment Rate (% of all aged 16-64), January 2010- June 2020)

Source: ONS, 2020

- 3.8 Rebalancing of the UK economy to reduce its reliance on the London and South East economies continues to play an important role in national economic strategy and is a key focus of the ERDF programme. There remain large disparities in productivity between LEPs. According to 2018 data<sup>6</sup>, GDP per working age person is £74,800 in London and £33,500 in Cornwall and the Isles of Scilly, representing a £41,300 productivity gap between the most and least productive LEP areas in England. This productivity gap has grown 8% since 2014 (from £38,200).
- 3.9 However, as illustrated in Figure 3.4 below, a number of LEPs with below average GVA per head in 2014 (£38,070) have achieved a higher than average growth between 2014 and 2018 (average change of 13%). A number of LEPs which perform poorly on productivity measures have experienced strong improvements over this period which is helping to close the gap in these areas, including Cornwall, Lancashire, the Marches and the Humber. However, the picture is clearly very mixed reflecting local circumstances, with a number of historically under-performing LEP areas continuing to experience below average improvements in GVA per head (e.g., the Solent, Tees Valley, Derbyshire and Nottinghamshire, and Cumbria).
- 3.10 As illustrated in Figure 3.5, over the financial year 2019/20, Oxfordshire LEP maintained the highest employment rate at 84%, which is 14 percentage points higher than the lowest employment rate of a LEP, 70% in Tees Valley<sup>7</sup> (with an average of 77% across England). The employment rate has increased across all LEP areas since 2014, reflecting strong employment growth across England pre-

<sup>&</sup>lt;sup>6</sup> ONS, Regional GVA (balanced), 2018 & ONS, Annual Population Survey, 2018

<sup>&</sup>lt;sup>7</sup> ONS, Annual Population Survey, 2020

pandemic. However, employment rate growth has been very unevenly spread and does not reflect a simple north-south perspective. LEPs in the same Northern and Midland regions for example, have experienced growth both well above and well below the average.

Figure 3.4 Percentage change in GVA per working age person between 2014-2018 £80,000 £70.000 20% £60.000 GVA per working age person (2014) £50,000 Percentage change in GVA per working age person (2014-2018) £40.000 10% £30,000 £20,000 £10,000 North East Enterprise M3 Cornwall and Isles of Scilly Heart of the South West Sheffield City Region Dorset **Buckinghamshire Thames Valley** Coast to Capita Gloucestershire Tees Valley West of England Swindon and Wiltshire New Anglia Greater Lincolnshire eicester and Leicestershire. Worcestershire Liverpool City Regior Thames Valley Berkshire Black Country Coventry and Warwickshire Leeds City Region Stoke-on-Trent and Staffordshire South East South East Midlands Greater Manchester York, North Yorkshire and East Riding Greater Cambridge and Greater Peterborough The Marches Cheshire and Warrington Greater Birmingham and Solihul Derbyshire, Nottingham and Nottinghamshir Derby, I GVA per working age person (2014) - Less developed region ■ GVA per working age person (2014) - Transition region ■ GVA per working age person (2014) - Mixed region (more dev'ed and transition) ■ GVA per working age person (2014) - More developed region Percentage change in GVA per working age person (2014 and 2018)

Source: ONS, 2019

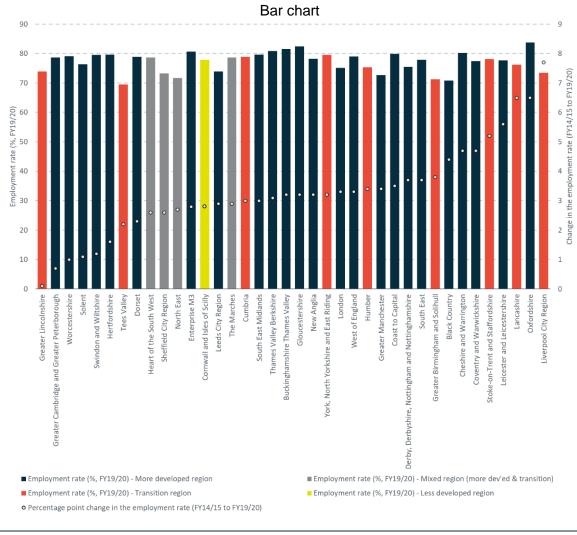


Figure 3.5 Absolute and Percentage Point change in employment rate between 2014-19

Source: ONS, 2020

3.11 The Centre for Cities' recent publication on measuring the achievements of the levelling up agenda<sup>8</sup> finds that cities and large towns in the Greater South East continue to perform most strongly across an index of economic and business indicators. The report also notes high levels of variation between the largest and fastest growing conurbations in the North and Midlands and their surrounding hinterlands, as well as the potential for these more successful areas to close the gaps on the South, if given the right support.

# Implications for Programme Strategy and Delivery

3.12 Prior to the emergence of Covid-19 the economy continued to demonstrate resilience and steady growth in the face of the challenges facing the national economy. Levels of business confidence have remained fairly stable over the last two years. The sub-national disparities in economic performance have remained

<sup>&</sup>lt;sup>8</sup> Centre for Cities, Measuring 'levelling up', February 2020

with the cities and large towns in the Greater South East continuing to perform most strongly across most economic and business indicators. Whilst a number of the larger conurbations outside of the South East, centred around Birmingham, Manchester and Leeds, are important economic drivers for their regions and have experienced strong growth, there remain gaps in performance outside of these centres in particular.

- 3.13 Immediately following the result of the EU Referendum there were some immediate uncertainties around the continuation of funding which caused temporary delays to project start dates, however, the assurances from government and the subsequent guarantee to fund projects until the programme's closure has mitigated this uncertainty which is no longer impacting on delivery.
- 3.14 The steady growth of the national economy pre-pandemic has ensured steady demand for growth-orientated business support and access to finance, especially related to PA1-4. This can be seen in the performance data presented in the following section.
- 3.15 Whilst the impact of the Covid-19 pandemic won't yet have been picked up in programme performance data or the economic impact evidence, it is worth noting its potential consequences. It has created a need for support to ensure the survival of SMEs and the safeguarding of employment. Whilst the UK Government has implemented a comprehensive response (including through the ERDF programme), the scale of the economic shock, the uncertainty of future lockdowns and the time limited nature of many of the economic and business measures, means a deep and prolonged recession is expected. A failure to secure a trade deal may further exacerbate this, in particular creating challenges for export orientated SMEs, as well as businesses reliant on imports as part of their supply chain.
- 3.16 The economic consequences of the pandemic will, in the short term at least, increase the demand for ERDF funded business support focused around resilience, re-orientation (especially linked to trade), working capital and ICT, as well as comprehensive approaches to address the challenges of particular localities (as being pursued in the new PA10).

# 4. Programme Performance

### Introduction

4.1 This section provides an analysis of the progress that the 2014-20 English ERDF programme is making in terms of its overall implementation, including progress towards achieving the 2023 lifetime targets. The analysis is split to provide a high-level overview of progress up to the end of quarter 1 2020 (with more detailed analysis provided in Appendix B). Given the focus on economic outcomes and impacts within Phase 2, we also focus on the achievement of against the lifetime output and outcomes targets and contracted activity.

# **Contracting of Project Activity**

4.2 The headline financial performance (pre-COVID-19) shows good progress on a range of measures. As illustrated in Table 4.1, to March 2020 the programme has legally contracted 70% of the available ERDF grant up from 40% in Q1 2019. There is a further 27% in the pipeline, putting the value of contracted ERDF grant and pipeline projects at 97% of the overall target. Whilst Covid-19 has had some impact on the contracting of projects in the pipeline this is limited to date and more than balanced by the contracting of Covid-19 recovery activities. There is nevertheless the need to be aware of the potential to lose projects in the pipeline, especially in PA1 and 4 where the size of the pipeline is large and potentially more vulnerable (at least in some investment priorities) to the effect of Covid-19 on the deliverability of projects.

Table 4.1 ERDF Expenditure Progress, end Q1 2020				
	Value	Proportion		
Programme Value	£3,233m	100%		
Legally Contracted	£2,256m	70%		
Contracted + Pipeline	£3,131m	97%		
Claims Paid	£1,047m	32%		

Source: MHCLG, Growth Programme Board ERDF Progress Update to 31st March 2020

- 4.3 In terms of the N+3 target, again, the programme has made good progress exceeding the 2019 target by 6% and currently making good progress towards the 2020 target. The Managing Authority has paid claims amounting to 30% of the overall programme's ERDF grant allocation to the end of January 2020. This varies significantly by priority axis with PAs 5 and 8 lagging behind, however this largely reflects the later contracting of projects in these particular priorities.
- 4.4 Table 4.2 provides more detailed financial data to the end of January 2020 and shows progress for priority axes has been good with a small number of priority axes lagging behind. In terms of contracted expenditure, priority axes 6 and 7 are still lower than the average due largely to issues of finding suitable areas for intervention

in PA6 and a major project held up at application stage in PA7. Detailed data on the project pipeline activity (i.e., including projects at the application, appraisal and precontracting phase) highlights a few areas for concern:

- There is a large amount of pipeline activity for PA1. However, as a result of COVID-19 there are associated financial pressures, there is a potential risk in terms of withdrawal of some activity.
- The risk in PA3 is fairly balanced. The COVID-19 response has led to more activity in this area (both in terms of commissioning of new activity and the reorientation of existing projects through change requests), however there is also the risk that growth-oriented activity falls off.
- Significant changes have been made by the Managing Authority and other relevant stakeholders to improve approval rates and pipeline in PA4. However, some pipeline projects could be at increased risk of withdrawal as the availability of match funding comes under pressure due to the knock-on effects of COVID-19. The GDTs have not seen projects falling away, although a risk review was being undertaken at the time of writing.
- For some priority axes with smaller allocations (PA2, PA5 and PA6), there is also a sizeable pipeline and shortfall on the overall grant allocation in some instances, which will need to be monitored.

Table 4.2 Contracted Expenditure by Priority Axis, January 2020						
	Notional	ERDF	% of	plus	% of	
	Allocation	Contracted	Allocation	Pipeline	Allocation	
	(£million)	(£million)		(£million)		
PA 1: R&I	727.5	476.8	66%	714.6	98%	
PA 2: ICT	100.5	61.2	61%	91.9	91%	
PA 3: SMEs	1,415.3	1,009.9	71%	1,376.3	97%	
PA 4: Low Carbon	685.3	416.9	61%	678.5	99%	
PA 5: Climate Change	74.3	51.3	69%	71.5	96%	
PA 6: Environment	77.6	46.4	60%	64.3	83%	
PA 7: Transport	52.3	29.8	57%	57.4	110%	
PA 8: Social Inclusion	32.4	28.4	88%	28.4	88%	
PA 9: TA	131.1	93.6	71%	94.4	72%	
Total	3,296.4	2,214.5	67%	3,177.3	96%	

Source: MHCLG, Performance Pack, January 2020; note: figures may not sum due to rounding; exchange rate: 0.9033; key: green - 10% points or more above the average, red – 10% points or more below the average, black – within 10% points of the average

4.5 Data for project approval rates suggests that the overall approval rate for applications in the pipeline remains fairly stable (at around 36%) following the early improvement. PA4 had the lowest approval rate, however measures put in place by MHCLG to raise awareness and adjust eligibility rules within the Operational Programme has significantly improved this. PA 5 and 6 have also seen significant improvements in approval rates with contracted expenditure picking up more recently. Applying past approval rates to pipeline expenditure at January 2020

implies an indicative future performance figure of around 78% of total allocation, leaving an indicative gap of 22%. However, this position will have improved through the subsequent approval of projects and the reallocation of resources (in PA3 in particular) to the Covid-19 response.

# **Progress Against the Performance Framework**

- 4.6 Table 4.3 below shows the progress against the 2023 performance framework output targets for each Priority Axis. The majority of priority axes have already contracted outputs equal to or in excess of the targets for 2023. Only one indicator is currently contracted to less than 75% of the performance framework target PA2 number of enterprises receiving support (Transition and More Developed regions only).
- 4.7 Compared to financial progress for notable Priority Axes, this compares as follows:
  - In a number of Priority Axes, output targets are being achieved at a faster rate than expenditure contracted. PA1 (Research & Innovation) shows significant overperformance against target outputs (131%) despite showing normal performance in terms of contracted expenditure (80% of allocation). While this is positive in terms of output progress, it may draw into question the realism of the targets when they were set (and it should be borne in mind this was a difficult part of the programme to quantify during the development phase due to the breadth of investment activities and some new types of activities for the ERDF programme).
  - The outputs listed under PA7 are also close to achieving the 2023 output targets while only 57% of the total target expenditure has been contracted. This appears to reflect the manner in which outputs for one large construction project have been claimed and this will right itself in due course.
  - PA6 has significantly overperformed (165%) on outputs versus relatively slow contracting of grant (60%). This indicates an unrealistic target, however, as with research and innovation, this is a relatively new focus for ERDF making it difficult to set targets.

Table 4.3 Performance against Performance Framework Output Targets by Priority Axis,							
January 2020							
Priority Axis	Performance Framework Output	Target (2023)	Contracted	% of target			
PA1: Innovation	Number of enterprises receiving	20,413	26,753	131%			
	support						
PA2: ICT	Number of enterprises receiving	10,602	7,692	73%			
	support (Transition and More						
Developed only)							
	Additional businesses with	2,102	2,200	105%			
	broadband access of at least						
	30mbps (Less Developed only)						
PA3: SMEs	Number of enterprises receiving	97,994	105,202	107%			
_	support						

PA4: Low	GHG reduction: Estimated annual	343,138	301,138	88%
Carbon	decrease of GHG (Tonnes of			
	CO <sub>2</sub> EQ)			
PA 5: Climate	Businesses and properties with	8,263	8,171	99%
Change	reduced flood risk			
PA 6:	Surface area of habitats supported to	1,459	2,406	165%
Environment	attain a better conservation status			
	(ha)			
PA 7:	Total length of reconstructed or	13	13	100%
Sustainable	upgraded roads of which: TEN-T			
Transport	(km)			
	Length of railway with new or	43	43	100%
	enhanced signalling installation (km)			
PA 8: Social	Number of enterprises receiving	1,788	2,348	131%
Inclusion	support			

Source: MHCLG, Performance Pack, January 2020; key: green - over 100% of final target achieved, black - 75% to 100% of final target achieved, red - less than 75% of final target achieved.

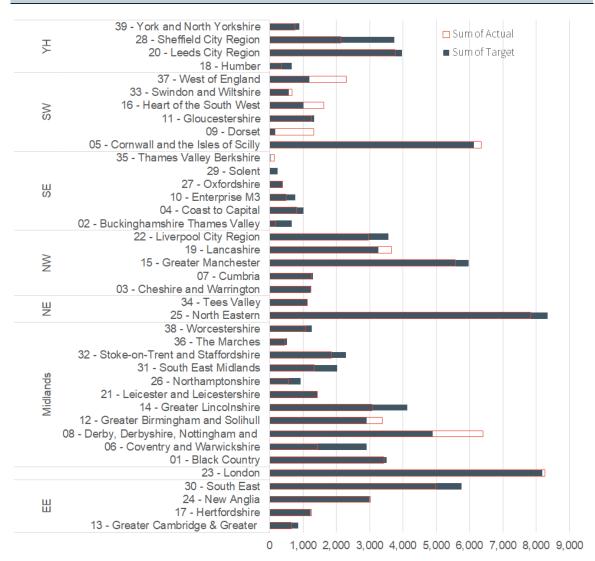
- 4.8 The analysis of the contracting of outputs by category of region indicates that the programme is already achieving or exceeding the Performance Framework Output Targets (>100% target) for over half (62%) of the outputs in terms of the amount contracted. There is no major pattern across the categories of region, aside from the transition areas having slightly slower progress (<75% target achieved) against targets and more developed areas seeing slightly more progress than other categories.</p>
- 4.9 The progress against the performance framework output targets at an overall programme level is, in general, good (see Table 4.4 which focused on key outputs only). The main exception is for the number of enterprises receiving support in PA2 (ICT), in part due to the delay in the delivery of broadband infrastructure. This area of the programme can be expected to get a boost in demand from SMEs for this type of support due to the impact of Covid-19 on businesses (although this is subject to the volume of activity currently contracted and timing of the contracting of any new projects which come forward in light of this need). This group of outputs are particularly important for the phase two evaluation as they are the main focus for the beneficiary surveys and the counterfactual impact analysis which are presented in later sections.

Table 4.4 Performance Against Key Output Indicators						
	Output Indicator	Claimed	Target	%		
C1	Enterprises receiving support (Enterprises)	66,173	159,269	42%		
P11	Number of potential entrepreneurs assisted to be	25,141	66,183	38%		
	enterprise ready (Enterprises)					
P13	P13 Number of enterprises receiving information		7,747	265%		
	diagnostic and brokerage support (Enterprises)					
C5	Number of new enterprises supported (Enterprises)	11,287	52,744	21%		
C8	Employment increase in supported enterprises	25,789	53,977	48%		
	(FTE)					

Source: MHCLG, Claims Data, RP4003 Outputs and Indicators Evaluation Report, end of January 2020; targets are summed up across Investment Priorities from the Operation Programme;

- 4.10 A closer analysis of the outputs indicates a number of issues related to specific output measures. These include:
  - Higher than expected C2 outputs being claimed (businesses receiving grants) compared to C1 outputs – due to the funding model, combining grant and advice, which some projects have adopted in order to meet the project level match funding requirement
  - Low levels of claimed C3 and C7 outputs to date (businesses receiving repayable finance and the associated private match funding) – due to the delay in output data for the large SME investment funds being integrated to the monitoring data
  - High levels of P2 output claimed compared to target (commercial floorspace)
     due to a combination of a relatively low target being included in the Operational Programme and strong demand from LEPs for these types of investments in response to local economic challenges
  - Higher than expected level of lighter touch diagnosis support to businesses
    (P13) across a number of investment priorities compared to target due to
    many projects initially claiming P13 outputs for the first support they provide
    to businesses, which then often form C1 outputs once they have reached the
    12 hour threshold but have not yet done so.
  - Significant over-achievement (fourfold) in the reduction in annual primary energy consumption of public buildings (C32) in PA4 it is not immediately clear what is driving this but will be investigated further in phase three.
- 4.11 The phase 2 evaluation has not been focused specifically on sub-national perspective in part due to the limitations of the evidence at lower spatial scales (especially the beneficiary surveys and the counterfactual impact analysis). Nevertheless, the delivery of the programme across the 38 LEP areas and the different approaches that LEPs have taken to respond to local challenges has led to a distinct spatial pattern in terms of contracted activities and outputs.
- 4.12 There are also significant differences emerging in the actual achievement of contracted outputs. Figure 4.1 and Figure 4.2 illustrate this for enterprises assisted (C1) and new jobs created (C8). Higher output claims tend to align with larger urban areas and areas with SME competitiveness challenges, although not in all cases (such as Humber). Interestingly the employment increase claims do not always follow the pattern of business assists claimed which indicates some areas have been more successful in converting business assists into growth in employment.
- 4.13 When compared with outputs contracted, there are a number of LEP areas that stand out as having made better progress in claiming outputs relative to that contracted including London, Greater Manchester, D2N2 and Cornwall and the Isles of Scilly. This may be reflective of these areas to some extent having more experience with European funding and therefore being able to submit claims more quickly and effectively.

Figure 4.1 Business Assist (C1) Outputs Claimed vs Contracted by LEP Area, December 2020



Source: MHCLG, Claims Data, RP4001 Outputs and Indicators Evaluation Report, end of December 2020

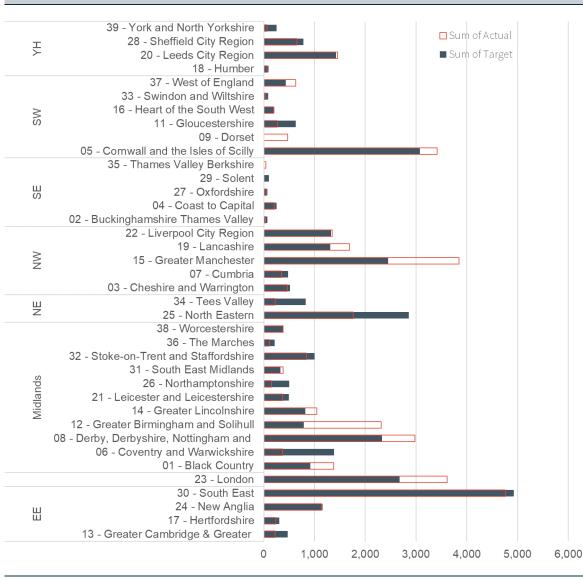


Figure 4.2 Employment Increase (C8) Outputs Claimed vs Contracted by LEP Area, December 2020

Source: MHCLG, Claims Data, RP4001 Outputs and Indicators Evaluation Report, end of December 2020

### Responding to Covid-19 Related Challenges

- 4.14 The Phase 1 Evaluation Report (2019) undertook a comprehensive review of programme delivery and management processes. As part of phase 2, a light touch update has been undertaken to identify progress against the recommendations. In practice, the necessity for the Managing Authority to take action against many of these recommendations has been lessened by the current phase of programme delivery, but also the emergence of the Covid-19 pandemic which created a number of challenges for Government and delivery bodies.
- 4.15 As illustrated below, the Managing Authority and its partners have responded to these new challenges through a number of important developments in aspects of

the governance, management and delivery of the programme (including the implications of and response due to Covid-19). The key points are:

- Most significantly, the review indicates that the managing authority implemented a rapid and pragmatic response to the challenges of COVID-19 regarding the potential impact on the programme strategy, allocating resources to address the expected economic impact, helping project deliverers to continue their work and helping ensure projects could deliver interventions to maximise their effectiveness in light of the significantly different delivery context that COVID-19 has created.
- The programme has introduced a Priority Axis 10<sup>9</sup>, allowing for further investments in COVID-response measures and utilising remaining funds within the programme. Indications are that demand has been very high for these new activities. The commissioning approach used in setting up these projects had not been used previously in the programme and is a potential procurement route for investment of any remaining funds (no decision has yet been made though on whether and how any remaining funds would be invested).
- MHCLG has also introduced a number of other initiatives in response to the Covid-19 crisis: £20m to help SMEs recover from the effects of the coronavirus pandemic; and the £10m <u>Kick-starting Tourism Package</u> providing small businesses in tourist destinations with grants of up to £5,000.
- GDT teams within the managing authority have lost significant numbers of staff for a period of several months, to work on COVID emergency response measures. However, a strong response from the Managing Authority helped ensure prioritisation of key GDT activities, and additional flexibilities in delivery (such as simplified change requests, prioritising claims payments for delivery partners with greatest cashflow challenges), which have enabled projects to continue to deliver with relatively little additional hindrance.
- Similarly, bid appraisal work has been affected by staff shortages following the COVID-19 outbreak, and GDTs were guided to prioritise appraisal of projects which could support COVID-response activities supporting businesses.

### **Strengthening Monitoring and Evaluation Systems**

4.16 MHCLG and the evaluation team have worked closely together during Phase 2 to improve the quality of the monitoring systems and data in order to ensure the full value of this evidence and information is realised in the evaluation. MHCLG have implemented, or are in the process of implementing, actions to address these lessons, focused around:

<sup>&</sup>lt;sup>9</sup>£51m of grant funding, at a 100% intervention rate, reallocated from PA3 to support the Reopening High Streets Safely Fund

- More timely and complete returns of output/outcome data monitoring data from grant recipients for the purposes of evaluation
- Addressing shortcomings in the quality of summative assessments and filling gaps in their coverage
- Encourage wider dissemination of summative assessment to aide leaning of lessons.
- 4.17 Needless to say, these measures need to be carefully balanced with the extra burdens they may place on delivery bodies at this time. Many of these steps will help to enhance the quality of the monitoring and evaluation data available during Phase 3.

# 5. Project Level Evaluation Evidence

### Introduction

- 5.1 Phase 2 tasks included a review of findings from a sample of project summative assessments (SAs). The purpose of the review was to better understand from a project level perspective whether there are any particular issues affecting their ability to deliver their contracted activities, outputs and outcomes, as well as any emerging insight into aspects of good practice in terms of types of interventions, delivery approaches and project management.
- 5.2 The summative assessments are a contractual requirement of all contracted projects, with the scope, approach and level of resource required being clearly set out in the Summative Assessment guidance issued by MHCLG.<sup>10</sup> The assessments cover: the continued relevance and consistency of the project; performance against financial and output targets; delivery and management processes; economic impacts; and value for money.
- 5.3 By the end of 2019, 186 summative assessments had been received by MHCLG and shared with the evaluation team. The phase two review sampled 81 of these summative assessments, representing 44% of those received to date. The total ERDF grant awarded to the sampled projects is £212.5m (an average of £2.6m) which represents 62% of ERDF grant awarded to all 186 projects for which summative assessments have been received (and around 10% of all ERDF money awarded to projects at the end of January 2020).
- 5.4 The assessments were selected for review across the Priority Axis in order to ensure a spread of projects across the Priority Axes (subject to their actual availability). The vast majority of assessments reviewed were funded through Priority Axes 1, 3 and 4 (72), with relatively few from the other priority axes (9). The selection also sought to ensure a reasonable spread across investment priorities within Priority Axes 1, 3 and 4, subject to availability. There was also a degree of targeting on larger projects, in order to both maximise the level of ERDF grant covered, as well as a recognition that larger projects are generally expected to apply more rigorous evaluation techniques.
- 5.5 Nevertheless, the relatively limited number of summative assessments reviewed at this stage has restricted the focus to higher analysis for a limited number of priority axes and provided limited scope for more detailed analysis at an investment priority level. It is this more detailed analysis, which will be undertaken in phase 3, that will provide more insight into the good practice and lessons to be drawn for specific types of intervention and different delivery approaches between these intervention types.

<sup>&</sup>lt;sup>10</sup> https://www.gov.uk/government/publications/evaluation-of-the-european-regional-development-fund-2014-to-2020

### **Relevance and Consistency**

- 5.6 The adequacy of the consideration of the relevance and consistency of the projects within the summative assessments was generally good. Project contexts were suitably localised, focusing in the main on alignment with LEP level strategy documents but with themes drawn from national policy where appropriate. This is consistent with the national programme's design to meet local growth objectives and need.
- 5.7 However, a common weakness was considering this only in terms of original economic and policy justification for the project at inception, rather than recognising that this context can evolve during the life of the project. In addition, many evaluators also failed to test if the market failures which were used to justify the project were still relevant or if overall need for the project interventions had changed in anyway.
- 5.8 Where changes to project context were covered, the main issues highlighted which had impacted on continued relevance and consistency were:
  - Uncertainty surrounding Brexit and the trade deal which impacted on the level of business confidence, with the potential for this to impact negatively on the demand for some forms of business and innovation support.
  - The introduction of new policies (such as the Industrial Strategy, Clean Growth Strategy or various local industrial strategies).
  - The introduction of new national programmes which were seen by the evaluators as competing with local initiatives (and often offering more favourable forms or generous levels of support). This was more common for energy efficiency projects.

# **Performance Against Targets**

- 5.9 Again, the overall quality of the analysis of delivery performance in project summative assessments was good. The requirement in the summative assessment guidance and in the summative assessment summary form to standardise the presentation of financial and output progress and to provide a RAG (Red, Amber, Green) rating ensured a reasonable degree of consistency in the approach to this section of the assessments. However, a fifth (18) of the summative assessments reviewed did not provide the standardised RAG rating. Also, in most cases the summative assessments reviewed did not provide a justification for the projected figures at project closure. As such, it is difficult to say how much weight can be put on the projections, particularly where projects are projecting a significant improvement in progress at closure (which was fairly common).
- 5.10 Overall, just over half of summative assessments are expecting to have achieved 95% of output and financial targets by project close:
  - **Financial Performance:** 58% (47) of summative assessments reviewed recorded a green or mostly green RAG rating (greater than 95% of target) for expected financial performance.

- Output Performance: in line with financial performance, 60% (49) of summative assessments reviewed had mostly green or all green expected output performance (greater than 95% of target) with 38% showing all green.
- 5.11 In a fifth of cases, it was not possible to tell from the summative assessments the progress which had been made at the time of the evaluation and the expected lifetime outturns.
- 5.12 Where projects have underperformed, the most common issue was a delay to project commencement, mainly due to getting the Grant Funding Agreement in place. Although some projects could push delivery back to accommodate the delay, others were working towards fixed or less flexible end dates. This then impacted on timescales for delivery and ultimately, take-up and the support on offer to beneficiaries. Although not explicitly noted in the reviews of this cohort of projects, it is likely that these delays were due in part to the EU referendum and uncertainties around funding continuity. This is less likely to be a persistent issue for the subsequent cohorts of projects which were approved.
- 5.13 Other issues faced by projects were varied and in a lot of cases project or delivery partner specific. Table 5.1 below provides a summary of factors influencing project progress against expenditure and output targets both positively and negatively.

xpenditure and Output Targets  Negative	Positive
The ability to recruit and retain staff, particularly for more specialised projects  Outputs being delivered more efficiently than expected at inception, leading to the achievement of outputs at a lower cost and hence an underspend  Existence of competitor support programmes, particularly those with more attractive intervention rates or support packages, impacting on demand and hence take-up of support  Poor scoping of demand for the project from beneficiaries resulting in unrealistic output and/or expenditure targets being set  The emergence of financial difficulties with public sector partners affecting the ability to provide match funding post contracting, leading to a lack of resource and capacity within the project  Demand for the particular types of support	<ul> <li>The continuation or replication of successful projects from earlier periods (although often with minor changes), including the retention of personnel across implementation periods</li> <li>Strong governance and partner relationships enabling effective and efficient project management and delivery</li> <li>Appropriate procedures in place to deal with foreseen and unforeseen risks including successfully implemented project change requests (and support from the GDTs)</li> <li>Unforeseen improvements in local economic circumstances such as increased business formation stimulating higher than expected demand for the support offered by project</li> </ul>

### **Project Delivery**

5.14 The review found that the delivery and management strand of the summative assessments was, on whole, the most insightful and highest quality of the evaluation

- themes covered. Three out of four of the summative assessments assessed were judged as moderate or strong in terms of the quality of this aspect of the evaluation.
- 5.15 Although there were some significant issues with the quality of the summative assessments reviewed, the breadth of the sample enabled some useful conclusions and lessons that could be drawn on project delivery and management issues. This evidence will improve significantly during Phase 3 when there is a much greater number of summative assessments available across the programme's priority axes and investment priorities.
- 5.16 Many of the conclusions that can be drawn from the review apply across priority axes 1, 3 and 4, as well as other priorities although the available evidence is currently weaker for these. The main common conclusions are:
  - Building a phase 0 into delivery timescales: following the completion of contractual matters between MHCLG and the grant recipients, there were often delays in the commencement of project delivery which were not built into the original project timescales. There is merit in explicitly allowing an initial 2-3 month start-up phase for new revenue projects. This would have the added benefit of allowing grant recipients some time to check the continued appropriateness of their logic model to guide the delivery phase, to design and refine the implementation plans, and to put delivery and management personnel in place. This is less relevant for continuation projects which have already tested the appropriateness of their delivery model, given they would likely prefer to get started quickly to enable a smooth transition for delivery between project periods.
  - Streamlining and simplifying project processes and the support offer: this is cited as a key factor for a number of successful projects, especially those focusing on the delivery of innovation and business support to SMEs. It extends to streamlining a number of aspects of delivery and management including administration, sign up and screening of beneficiaries, marketing and communication of the support and benefits available and mapping of the client journey. As well as helping to provide efficient recruitment and delivery processes, the summative assessments suggest this is also linked to much better take-up of support as beneficiaries gain a clearer understanding of the offer.
  - Building on previous project experience and structures: a common theme in the summative assessments was the value of previous experience, existing networks and an established presence amongst local beneficiaries in enabling efficient delivery and management. These enabled continuation projects, or those that draw heavily on previous local initiatives, to commence delivery promptly with a tried and tested delivery model and management structures.
  - Understanding clients' needs and engaging early: a number of summative assessments cited the value of knowledge of the target clients built up over time or through the commissioning of additional research. This helped to inform the assessment and testing of demand, development and tailoring of the offer to businesses, and the targeting and recruitment of businesses.

- Putting in place mitigating measures to address any staff changes: A
  number of projects have faced significant challenges in recruiting and
  retaining a good calibre of staff, most commonly at the start and end of the
  delivery period (although it was not uncommon for it to be a more persistent
  issue in areas where labour markets were particularly tight). A clear continuity
  plan should be set out in the project development phase to show that projects
  can continue to deliver in the face of such challenges.
- 5.17 The review of the summative assessments has also started to provide more specific insights into project delivery lessons for investment activities within priorities axes 1, 3 and 4 in particular. Again, there is a degree of overlap in the messages across these priority axes.

# **Priority Axis 1: Research & Innovation Support**

5.18 The review included 30 research and innovation projects which can be split between those delivering infrastructure for research (e.g., R&D space and facilities), those delivering more intensive, tailored, collaborative and R&D focused support services for SMEs that are already engaged in R&D, and those delivering more generic innovation support for businesses that are less engaged in innovation on a day-today basis.

#### **Marketing and Engagement**

- 5.19 The review of summative assessments highlighted a number of lessons and best practice in marketing and client engagement for research and innovation projects:
  - Good market assessment evidence to underpin capital investments:
     proposals to deliver research infrastructure, for new R&D space, facilities
     (including equipment) and incubators, should be underpinned by good quality
     research on the scale and nature of local demand and need (as well as
     funding availability). This will help to ensure the project is justified in market
     and commercial terms, the approach to marketing can be tailored, and
     difficulties engaging SMEs can be avoided.
  - Targeting the right SMEs: It is crucial that the right types of SMEs are targeted for support. This is particularly true for projects delivering more intensive and R&D-focused services, where beneficiaries should be well placed to collaborate & engage in research in the specialist areas covered. Thorough application and screening processes and targeted marketing can help ensure that this is the case. The summative assessments point to several examples of research projects that have not been focused on the appropriateness of the businesses but are instead more concerned about the need to meet business support volume targets.
  - Linking into existing networks of clients/stakeholders and supplychains: links into existing partners in industry, local business networks and sector bodies, also including local partners such as local growth hubs, can be

particularly useful in raising awareness about the support and securing SME engagement. There is a risk that HEIs engage only with those businesses that they have already engaged in R&D support and services; some summative assessment findings show that HEI led projects have failed to reach a wider client audience in taking too strong a focus on existing SME links.

 Dedicated Business Development Managers: the use of dedicated Business Development Managers (BDMs) in engaging SMEs can provide a key advantage in terms of demand stimulation for R&I type business support. This is particularly true among HEI partners that are looking to build their engagement with SMEs.

#### **Support Types and Intensity**

- 5.20 The review of summative assessments, although limited in number in Phase 2, suggests that in general terms all three types are delivering effective services which help SMEs to engage and invest in R&I. There is a clear on-going requirement to maintain a balance between more intensive and bespoke (or technology/sector specific) services alongside more generic innovation support in order to address ongoing national priorities and local need.
- 5.21 At this stage, the summative assessments reviewed have not pointed to specific approaches to the delivery of support as being more effective than others (e.g., workshops vs on-to-one support vs collaborative projects). Each project needs to carefully structure services to align to client need/demand and the nature of R&I support being provided. Projects should also be prepared to change the means of support during the delivery phase where there is evidence that this is in high demand or that it would be more effective than existing approaches (as long as contractual outputs and outcomes are still met). However, the review has pointed to a number of general lessons:
  - Ensuring strong strategic/action planning for clients: A number of
    projects have pointed to the need for clear action planning on top of wider
    R&I support, to ensure that practical business considerations are considered,
    investment is feasible, and support is converted into impacts. More projects
    should consider providing this type of support.
  - Innovation vouchers can be an effective means of securing business investment, but evidence is limited: We have reviewed findings from a limited number of summative assessments covering projects that delivered innovation vouchers or SME grants. This shows that it has typically been effective in encouraging and de-risking SME investment in R&I. Often a relatively small grant/voucher contribution can allow SMEs to build on the wider advice and support received to invest in new technologies and processes to enhance productivity.
  - **Demand for specific additional support types:** PA1 Summative assessments have pointed to the effectiveness of, and demand from SME clients for, various types of support approaches. This includes:

- Longer term support: a number of PA1 projects have provided support to SMEs beyond the 12-hour requirement for a C1 output. There have also been some demands from clients for longer-term support. This could be for intensive services (e.g., where R&D requires long-term support to progress to commercialization) and for more generic support (e.g., where clients have progressed along a ladder of support and move towards larger scale plans for investment in R&I). Options should be considered to incentivise more in-depth support where appropriate.
- Workshops, networking opportunities and cohort approaches: allowing opportunities for peer-to-peer learning and collaboration. Cohort approaches have been found in several cases to be an effective way of engaging clients and facilitating strong commitment to change amongst businesses which are initially unsure of the value of innovation to them.

# **Priority Axis 3: SME Competitiveness**

5.22 The review of summative assessments included 30 projects funded through Priority Axis 3 covering general business support; more specialist growth programmes, sector and supply chain support projects; inward investment promotion projects and start-up support targeting existing and aspiring entrepreneurs.

### **Marketing and Client Engagement**

- 5.23 A variety of marketing techniques were cited in the summative assessments including networking, major events, signposting from Growth Hubs and other services, and social media and website development. The need to adopt a tailored approach to the type of support and target beneficiaries was a common conclusion of the assessments, as well as a number of the points noted for R&I support. Other common messages included:
  - Understanding the context and wider offer more successful projects tended to have much better awareness of the wider context and other support on offer, particularly for business support projects where referrals from and to other stakeholders was particularly helpful. It was also clear that beneficiaries benefitted where project teams had mapped out their customer journeys to provide clarity about the support on offer.
  - Importance of co-ordination amongst delivery partners a number of the assessments pointed to the importance of this for larger projects involving multiple strategic or delivery partners. The summative assessments highlighted instances where uncoordinated activity has affected the quality and clarity of marketing and engagement, and in some cases led to additional work for the core delivery team in resolving issues.

Leveraging local expertise – for projects with more of a focus on sustainable
local development and enterprise, there is value in leveraging local partners
with strong links to deprived communities or hard to reach groups. These
groups are often best reached and engaged with through other organisations
which have established and trusted relationships with the target groups.

#### **Support Types and Intensity**

- 5.24 The summative assessments pointed to a common set of messages about the approaches which helped to ensure effective delivery of support to businesses:
  - Tailoring type of support and delivery approach to the businesses: a
    number of summative assessments pointed to more effective support to
    businesses where it could be tailored to their specific needs. Whilst not
    always appropriate, initial diagnostic sessions were noted in some
    assessments as quick ways of identifying the business needs and tailoring
    the support (through for example, a personalised action plan).
  - Credibility of advisors and business support specialists: a consistent message was credibility of the business advisors and consultants that worked with businesses. This appears to help to reduce drop-out and builds business commitment to long term action.
  - Clarity about support, client journey and aftercare: where negative feedback has been received from businesses, a common factor highlighted in some summative assessments was the lack of clarity over the support that businesses would receive, when the support was complete and the absence of any aftercare (e.g., provision of sign-posting or suggestions for further networking opportunities).
- 5.25 Most of the projects covered in the review of summative assessments appear to be delivering effective business support services, but the size of the sample at this stage has not provided a basis for drawing messages about the variations between types of support. Depending on the context, both general and more intensive and bespoke support projects have their roles in helping businesses overcome their barriers to development. The summative assessments did provide some insight into different types of support and delivery approaches:
  - Use of cohorts: providing support through the use of cohorts of businesses is a fairly common approach to delivery where these businesses receive the support as a group. The approach can be particularly effective for growth, sector and supply chain focused projects where businesses have a common characteristic or interest. However, a number of summative assessments pointed to the approach not working so well where it was not possible to achieve this degree of common ground amongst the participants.
  - Leveraging expertise: sector and supply chain intervention projects were able to provide specialist support that was of additional value to their beneficiaries. Such projects were able to focus support by utilising their knowledge, experience and sector specific network to provide peer-to-peer and specialists individual or group support.

- Watering down of more specialist support: the review pointed to instances where projects had either intentionally or unintentionally watered down the support they were providing to businesses. Various reasons were given including the challenges of recruiting sufficient businesses, changes in local and national context (including Brexit) and the pressures on projects to balance financial and output considerations. The summative assessment evidence (although limited in this regard at this stage) points to these projects underperforming in terms of the customer experience and impact.
- **Demand for specific additional support types:** several summative assessments pointed to the need for projects to be able to provide more intensive support or larger financial grants to businesses as a means of securing greater business and local economic benefits.

### **Priority Axis 4: Low Carbon Economy**

- 5.26 The review only included 12 Priority Axis project summative assessments for PA4, consisting mostly of SME R&I and energy and resource efficiency projects. As these projects mainly consist of the provision of advice, guidance and consultancy to SMEs, some of the messages are similar to the findings for Priority Axes 1 and 3 above. However, there are a number of messages which are specific to this priority:
  - Targeting support to the right clients: A number of the assessments highlighted the specific challenges of promoting both resource and efficiency or more niche innovation support services to SMEs. A number of had failed to adequately recognise these challenges and struggled to secure a sufficient volume of businesses initially. Also, a number of more specialist innovation projects had been forced to relax their eligibility criteria in order to meet contractual targets, thereby reducing the potential for these participants to really benefit and generate local economic benefit from what were often exciting low carbon technology projects.
  - Knowledge and experience of advisors, clarity of client journey and regular contact: again, as with Priority Axes 1 and 3, there was a clear message about the importance of expert advice to innovation and business support services delivered through PA4. This was especially the case where services are supporting clients to adopt new technologies and efficiency measures that SMEs may have limited understanding/experience of, or activities requiring specialist academic and commercial support to develop new technologies.
  - Ensuring clarity of client recommendations and action plans: This is particularly important for projects that are supporting businesses to invest in new energy efficiency or low carbon measures that they have little or no previous experience of. Advisers should work closely with businesses to understand their needs, the practicality of implementation and the cost-benefit to their businesses. Actions should then be set out in clear and understandable terms to ensure that businesses can invest in a way that will be problem-free, effective and generated the desired impacts.

- Technical advice, supplemented with grant funding, can be an attractive
  offer to SMEs: a number of assessments pointed to the attractiveness of a
  combination of technical advice on energy efficiency measures to SMEs
  alongside some grant support to help businesses to overcome the possible
  inertia faced to acting on advice, as well as helping to reduce the financial
  hurdles for them.
- Ensuring alignment with wider provision: One project was competing with another national project, which offered larger and more favourable grants in the early stages of delivery. This resulted in limited take-up until that programme ended. Thorough market scoping and alignment with the competing national offer could have mitigated against this.

#### **Economic Outcomes and Impacts**

- 5.27 The summative assessment guidance issued by MHCLG encourages grant recipients to undertake robust assessments of the outcomes and impacts they achieve amongst the relevant beneficiary groups and the local economy. Whilst they are encouraged to use counterfactual methods were appropriate, there is a recognition that other less robust methods will need to be used including theory of change, analysis of changes in baseline conditions and surveys of beneficiaries. Grant recipients and their evaluators are encouraged to tailor their methods to the value of the project, the type of intervention, the type of beneficiary and expected outcomes and impacts.
- 5.28 As we would expect, there were a range of techniques used to measure outcomes and impacts across the 81 summative assessments which were reviewed. In general, there was a lack of transparency about the methods used across summative assessments which made it difficult to understand which techniques were being used and to assess their robustness. In the case of 12 of the assessments reviewed, there was no formal assessment of business outcomes or economic impacts over and above the review of project performance against contracted outcomes measures.
- 5.29 Overall, half of the summative assessments reviewed were judged to have weak assessments of outcomes and impact (41 out of 81 reviewed), or there was too little information presented to judge. Only 11 were judged to have strong assessments.
- 5.30 A further issue in using the impact evidence from the summative assessments in the national evaluation is the inconsistency in the measures of impact used. The Summative Assessment guidance includes a template which enables project evaluators to present clearly their gross to net estimates and adjustments, impact areas and specific impact measures which are used. However, only a half of these assessments included these summaries. The upshot is that where quantitative evidence is provided, there is a lot of variation in the figures presented in the summative assessments, particularly in terms of gross versus net and present versus future impacts, as well as some where the basis of the impacts is often not clear.

5.31 Although the sample size, inconsistency and quality of impact estimates does not allow us to draw any robust conclusions from the value for money evidence, we are able to analyse the variability of estimates in summative assessments. Figure 5.1 below illustrates the variability, even within priority axes, of the cost per job estimates in the summative assessments. Only a jobs created measure is used here as the data is more complete than for financial turnover, GVA or productivity measures.

£700,000 PA1 PA2 **EERDF** Grant per FTE Job Supported £600,000 PA3 PA4 £500,000 PA6 £400,000 £300,000 £200.000 £100,000 £0 Gross Net Gross Net Present Future Future Present

Figure 5.1 Spread of Summative Assessment Cost per Job Estimates by Priority Axes

Source: Review of 81 Summative Assessments; gross refers to the overall level of job creation, whilst net typically refers to the adjustment for deadweight, additionality and displacement; 'present' refers to the estimate of the cost per job just on the basis of the job creation and cost position at the end of the funding period, whilst 'future' also includes an estimate of the expected future job creation (and may also include an adjustment for the persistence of the economic benefits).

5.32 The analysis below should be taken as illustrative at best, given the lack of comparability between value for money and impact estimates and the sample sizes. The review has taken the impact estimates from the summative assessments reviewed and divided them by the total ERDF grant for the project to provide illustrative value for money and cost per job estimates. Capital projects were excluded as the timing of the summative assessments meant that impact evidence was difficult to collect, resulting in very poor value for money. As such, these have been considered outliers. Table 5.2 below shows the average of these estimates by priority axis with sample sizes shown in brackets.

Table 5.2 Average Cost per Job by Priority Axis for Non-Capital Projects						
	Gross (sample size)		Net (sample size)			
Priority Axis	Present	Future	Present	Future		
PA1	£45,300 (18)	£11,400 (5)	£108,100 (25)	£13,800 (7)		
PA2	£8,000 (2)	-	£17,000 (2)	-		
PA3	£9,400 (17)	£3,700 (4)	£15,600 (26)	£4,200 (4)		
PA4	£18,900 (2)	£42,900 (1)	£41,300 (10)	£95,400 (1)		
All Projects	£26,400 (39)	£11,500 (10)	£57,500 (46)	£17,400 (12)		

Source: Review of 63 Summative Assessments (excludes capital projects); note: sample sizes are presented in brackets

- 5.33 As expected, the analysis shows that cost per job reduces significantly when moving from gross to future impacts as projects are expecting interventions to deliver significantly larger impacts in future.
- 5.34 The inconsistency of the impact and outcomes evidence means it is difficult at this stage to draw out from this source of evidence which broad intervention categories or specific activities have been more effective in delivering higher impacts and better value for money. Whilst bearing these issues and the limited evidence available at this stage in mind, there is some evidence about the factors influencing the realisation of outcomes and impacts from the summative assessments:
  - Lighter touch support may be associated with disproportionately lower impacts and outcomes, although it is not clear if the businesses receiving this support may benefit in other ways which are harder to account for, such as being encouraged to seek further support as a consequence of their experience (this will be explored further as part of the counterfactual impact assessment in Phase 3)
  - The use of outcome and impact measures within the projects' monitoring framework to steer delivery throughout the project lifecycle in order to keep a focus on impacts as well as the typical focus on contractual targets
  - The use of partners and stakeholders in order to ensure enhanced take-up, the quality of service delivery and aftercare, and sign-posting to follow-on support.

### 5.35 Some of the challenges faced by projects include:

- Poorly scoped demand and ability to screen beneficiaries, leading to an inappropriate beneficiary profile (e.g., not enough businesses with high growth potential engaged with the project)
- Limited scope for change or adaptation of delivery methods and activities to react to beneficiary needs
- Reported impacts being dampened down due to them being realised after project closure (e.g., R&I or infrastructure projects in particular) and evaluators not capturing these due to the uncertainty attached to them.

# 6. SME Beneficiary Experience and Outcomes

- 6.1 This section provides an overview of the evidence collected from beneficiaries through the phase 2 surveys on beneficiary experience and outcomes. A fuller analysis of the evidence is provided in Appendix D.
- 6.2 The scoping of Phase 2 explored the manner in which SME beneficiary surveys could provide a valuable source of large scale data which can inform the process, impact and VFM assessment, as well as strengthening the counterfactual impact assessments. The approach recognises the limitations in the use of beneficiary surveys in providing self-reported evidence of outcomes. However, there is nevertheless merit in undertaking surveys given the scope to collect quantitative and qualitative information in a consistent format about the reasons for seeking support, contribution of the support to business change and the levels of satisfaction.
- 6.3 As outlined in Table 6.1, multiple surveys were undertaken, aligned to the types of interventions being funded across the programme's priority axes and the stages of development of the entrepreneurs and businesses that were targeted. Whilst three surveys were undertaken, the results which follow are presented for five distinct types of business support groups: (i) potential entrepreneurs' support; (ii) start-up support targeted at new or very young businesses (less than one year in age); (iii) research and innovation support; (iv) SME competitiveness support; and (v) resource and energy efficiency support.

Table 6.1 Coverage of Programme Intervention Themes and Investment Priorities in the Beneficiary Surveys						
	ĺ	Broa	d Types of Support:			
			Start-up Business	SME		
		Entrepreneur	Support	Competitivenes	Resource &	
	Research & Innovation Support (IP1b, IP4f)	Support (IP3a, IP8d)	(IP3a, IP8d)	s Support (IP2b, IP3c, IP3d)	Energy Efficiency Support	
Focus of survey:					(IP4b, IP6d)	
		Entrepreneur				
Aspiring		& Start-up				
entrepreneurs		Survey				
	Research		Entrepreneur			
Start-ups (less than	/Innovation		& Start-up			
12 months)	Survey		Survey			
	Research			SME Comp	SME Comp	
	/Innovation			Survey	Survey	
Established SMEs	Survey					

Source: Hatch

6.4 Table 6.2 sets out the original target samples for the proposed phase 2 beneficiaries surveys, as well as the achieved samples. Appendix D provides a fuller explanation of the survey method and achieved response. With the exception of the Research and Innovation survey, the achieved samples were smaller than the targets set. This was due to a combination of fewer beneficiaries being available to survey and the

challenges of conducting businesses during the Covid-19 pandemic. It was not possible to undertake the survey of researchers due to there being too few beneficiaries being available at the time.

Table 6.2 Phase 2 Target and Achieved Business Beneficiary Survey Samples							
	Estimated	Target Sample	Beneficiaries	Achieved			
	Beneficiaries	(at 95% confidence level)	Received	Survey Sample			
	(mid 2019)		(end 2019)				
Researcher Survey	216	50	-	Survey not			
		(23% of beneficiaries)		conducted			
		+/- 12.8					
Research & Innovation Support	5,100	1,000	5,478	1,003			
Survey		(20% of beneficiaries)					
		+/- 2.78					
Entrepreneur & Start-up Survey:							
- Potential entrepreneurs	15,600	1,450 (9% of	8,408	730			
		beneficiaries)					
		+/- 2.45					
- New business supported	13,600	950	]	422			
		(7% of beneficiaries)					
		+/- 3.07					
SME Competitiveness Survey	27,800	2,500	14,238	2,125			
		(9% of beneficiaries)					
		+/- 1.87					
- of which Resource/Energy	6,400	c 500 (8%; included in	591	88			
Efficiency		SME Comp survey)					
-		+/- 4.21					

Source: Hatch and BMG Research

## Representativeness of the Sample

- 6.5 The surveys have indicated that a fairly large proportion of the businesses being supported through the SME Competitiveness and Innovation support (excluding the start-up support) are sole proprietors and micro-businesses. Whilst this size category may be an appropriate part of the clientele mix for these types of business support, it does raise the question as to its effectiveness in delivering business and economic impacts and hence the appropriate level of allocation of programme resource to them (and needs to be further investigated in Phase 3)
- 6.6 In terms of sectoral composition, the survey sample is different to that of the business population as a whole with a higher concentration in production sectors and lower concentrations in retail and wholesale trade and logistics. However, this is to be expected given the focus and priorities of the programme.

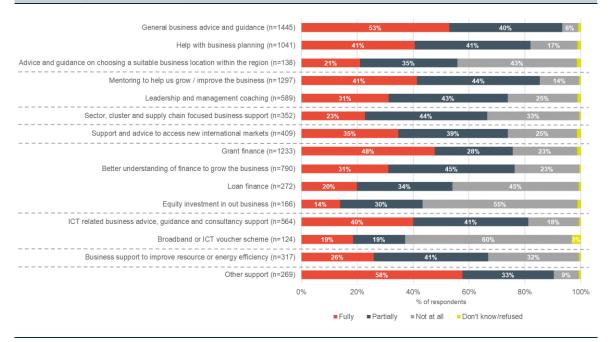
### **Meeting Beneficiary Expectations and Needs**

6.7 The beneficiary surveys suggest that projects have been able to provide the forms of support that SMEs and individuals felt they required with their needs being met

fully or partially in over 90% of cases on average. Some key points are shown below with detailed analysis on expectations and needs for each support type provided in Appendix D:

- For the most common support activities for SME competitiveness (General Business Advice and Guidance) and Innovation (Advice on Products and Services) support, 93% and 90% of beneficiaries found that their needs had been met either fully or partially, respectively. The extent to which expectations were met tended to be higher for Innovation Support beneficiaries across the full range of support activity types.
- Across all the main support types, the beneficiaries' needs were less likely to have been fully partially met where they received specific broadband and finance support. This could be due to businesses receiving advice and guidance rather than the broadband connectivity and repayable finance they might have been expecting, although the surveys do not provide firm evidence to back this proposition up. The starkest example of this is where 70% of start-up support beneficiaries and 60% of SME competitiveness beneficiaries stated that their expectations for Broadband or ICT Voucher schemes were not met all.
- Amongst the beneficiaries receiving start-up and enterprise support, the
  pattern was similar to the other broad types of support although there were
  more specific types of support activities where the proportion of beneficiaries
  stating their needs were not met at all was over 50%. This suggests the
  possibility of more poorly targeted support to the needs of beneficiaries or
  more variability.
- 6.8 Figure 6.3 below illustrates the spread of support activities and the variability in the extent to which it was received for the most popular support type (SME Competitiveness). Charts for each of the support types can be found in Appendix D.

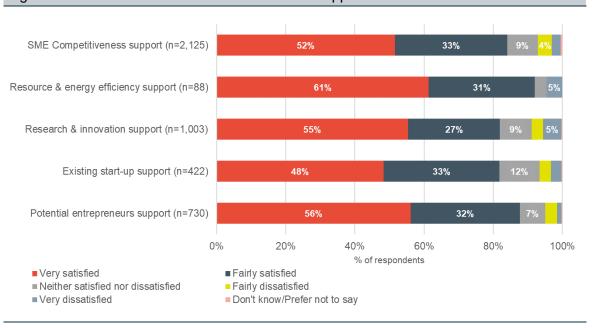
Figure 6.3 Support activities that businesses are interested in & extent of receiving them, SME Competitiveness Support



Source: ERDF National Evaluation Phase 2 SME Competitiveness Support Survey, n=2,125

6.9 The beneficiary surveys also confirmed the findings of the available summative assessment evidence, with average satisfaction (very or fairly satisfied) at around 85% overall, ranging from 81% for start-up support beneficiaries to 92% for resource and energy efficiency support beneficiaries. Around 90% would be happy to recommend the project from which they received support to other beneficiaries like themselves as illustrated in Figure 6.4 below.

Figure 6.4 General level of satisfaction with the support received

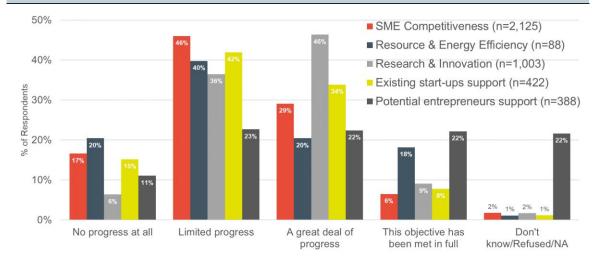


Source: ERDF National Evaluation Phase 2 SME Competitiveness, Research and Innovation and Entrepreneurs Surveys, September 2020

### **Beneficiary Outcomes and Impacts**

- 6.10 The surveys have also sought to gain a much more detailed, consistent and robust insight into their perspectives on outcomes and impacts (but not causality), grouped by the main support types. Aims and objectives as well as obstacles faced by business beneficiaries have been wide and varied across the main groups of respondents but also within the beneficiary types. As illustrated in Figure 6.5, businesses in general reported making good progress in addressing obstacles and progressing towards their goals as a result of the support received:
  - SMEs receiving research & innovation support reported making relatively better progress with 55% stating that they have made a great deal of progress or fully met their objectives. This compares to 35% for those receiving SME competitiveness support
  - Potential entrepreneurs have seen the highest proportion of beneficiaries with their objectives having been met in full (22%). This may reflect the nature of their objectives when accessing support, the most common of which was to start their own business in order to pursue their interests and have greater flexibility, which may be relatively easy to achieve in its own right with or without the right support. This contrasts with the types of business objectives associated with innovation, growth and productivity type objectives of SMEs which may be harder and take longer to achieve.

Figure 6.5 Progress Achieved Towards Businesses Objectives Related to the ERDF Support Received



Source: ERDF National Evaluation Phase 2 SME Competitiveness and Research and Innovation Surveys, September 2020; Notes: for some support types the chart shows the result for the most often cited support activity; this question was only answered by potential entrepreneurs who went on to start a business post-support; A large share of potential entrepreneur respondents reported that a number of objectives were not relevant to their business.

6.11 Respondents also reported reasonable levels of additionality in terms of the support they received, with the vast majority (over 80%) finding that the support played at least some role in making progress with these objectives. As shown in Figure 6.6 below, for all support types, respondents were most likely to state that the support

was useful in accelerating the speed at which goals were progressed, rather than enhancing the quality of outcomes or being the primary driver of progress. This suggests that the business support received through ERDF funded projects is commonly an important catalyst to change but by no means the sole or main factor.

- Those receiving resource and energy efficiency support were slightly more likely to find the support instrumental in making progress against objectives with 22% stating that they would not have made any progress without support. This potentially reflects the type of support often delivered to these beneficiaries which can involve direct installation of resource or energy efficiency measures. Many businesses would not have had the knowledge or expertise to make these decisions without the input of advisors.
- In contrast, SME competitiveness support beneficiaries had the highest proportion reporting that support had accelerated progress (55%) and the lowest reporting that support had been instrumental in progressing objectives (8%). This may suggest that the support provided to these beneficiaries was more light touch or likely to have been implemented alongside other measures implemented by or for the SMEs.

60% ■ SME Competitiveness Support (n=1,572) ■ Resource & Energy Efficiency Support (n=77) ■ Research & Innovation Support (n=922) % of respondents (who made Existing start-ups support (n=398) ■ Potential entrepreneurs support (n=382) 0% Achieved anyway Achieved over a Don't Achieved at a Achieved at a None of these (same time, longer time smaller scale lower quality would have know/Refused scale & quality) period happened

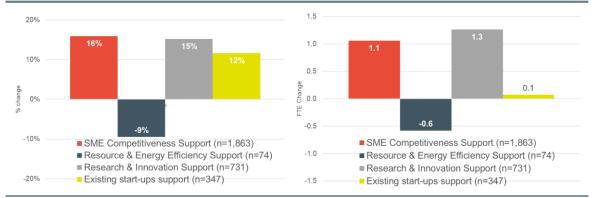
Figure 6.6 Extent to Which Businesses Would Have Progressed Against Objectives Without Support

Source: ERDF National Evaluation Phase 2 SME Competitiveness and Research and Innovation Surveys, September 2020

- 6.12 Overall, there has been some increase in employment (over 15% across the sample) averaging over 1 FTE employee per business in gross terms. As shown in Figure 6.7 below, the changes varied to some extent by support type:
  - The highest employment growth was amongst beneficiaries receiving SME competitiveness and innovation type support. However, whilst businesses receiving SME competitiveness support might be expected to growth faster, it may well be less than might be expected due to the high proportion of sole proprietors and micro-businesses which appear to be supported.

- Resource and Energy Efficiency support beneficiaries saw a decline in employment (0.6 FTEs per business or 9% overall), which is possibly a result of the businesses seeking the support being more focused on cost reduction and sustainability, and not necessarily employment growth.
- The slightly lower average FTE change for start-up support (0.1 FTE versus 1 FTE overall) is largely down to the smaller size of the businesses supported. However, the percentage change in employment (12%) is also slightly less than those beneficiaries receiving innovation (15%) and SME competitiveness (16%) support, which is potentially a result of start-up support focusing on business survival rather than high growth and entry into new markets.
- Across the intervention types, the surveys found that grant and repayable finance is relatively well-correlated with higher increases in gross employment.

Figure 6.7 Percentage and Average Change in Gross Employment (FTEs) Amongst Businesses Receiving ERDF Support, Before and After Support



Source: ERDF National Evaluation Phase 2 SME Competitiveness, Research and Innovation and Entrepreneurs Surveys, September 2020

- 6.13 The measure of turnover change showed a much wider variation across the sample which may reflect measurement issues associated with the collection method rather than actual changes experienced by beneficiary businesses. This will need further investigation as part of the design of phase 3.
- 6.14 The survey also provides insights on the potential for the improvements in the business bottom-line performance to be at the expense of displaced trade amongst other businesses in the local economy. As shown in Figure 6.8, 50% or more of respondent's competitors were outside of their local area on average for all support types (with this being used as a proxy for the potential for displacement to occur). Other findings included:
  - The potential for local displacement was lowest for those receiving research and innovation support followed by SME competitiveness support beneficiaries with over two thirds of the respondents' competitors on average located outside of their local area. This suggests that support provided to these SMEs is more likely on average, compared to other forms of assistance, to support net additional economic activity locally.

- Unsurprisingly, the average proportion of competitors in beneficiaries' local areas was relatively high for start-ups (42%) and potential entrepreneurs (45%) reflecting the smaller size and, in many cases, smaller markets for the products and services of these businesses.
- The business benefiting from resource and energy efficiency support have the highest average proportion of local competitors (50%), however the support they are receiving is far less likely to provide competitive advantages which could displace the trade of other local or national businesses.

SME Competitiveness Support (n=1,509)

Resource & Energy Efficiency Support (n=48)

Research & Innovation Support (n=250)

Existing start-ups support (n=250)

Potential entrepreneurs support (n=206)

38%

38%

Within your local area

Elsewhere within the UK

Outside of the UK

Figure 6.8 Percentage of Business Beneficiaries' Main Competitors by Location

Source: ERDF National Evaluation Phase 2 SME Competitiveness, Research and Innovation and Entrepreneurs Surveys, September 2020

# 7. Counterfactual Impact Evidence

# Introduction

- 7.1 This section uses a counterfactual approach to examine the economic impacts which are attributable to the ERDF investments. In counterfactual impact analysis, as well as understanding the performance of supported businesses and areas, evidence about what would have happened without support is considered by looking at the comparable but unsupported businesses and areas as benchmarks.
- 7.2 The Phase 2 report focuses on two analytical strands:
  - Impact evaluation using firm-level data. A first method links supported businesses to the ONS Business Structure Database (BSD) and other firm-level data. The beneficiaries' employment, turnover and productivity growth are tracked, complemented by other impact measures including innovation outputs. A statistical technique called propensity score matching identifies a counterfactual (i.e., a non-treatment or control group) and then difference-in-difference is used to understand whether the growth seen in supported businesses differs from the control group.
  - Impact evaluation using spatial differencing. A second approach is to consider the economic impacts from the area-based interventions supported by the ERDF programme. The ONS BSD supports this approach too. The focus is on changes in employment, turnover and productivity growth in firms based in areas in which the investments occur compared with unsupported areas at varying distances. Spatial and time-differencing (i.e., comparing differences between areas over time) is used.
- 7.3 This splitting of analysis reflects the differences in the nature of the ERDF support. Many ERDF-funded projects directly supported businesses and aspiring entrepreneurs, while place-based investments support economic effects that are areawide. The basis for analysis for the first type of analysis is beneficiaries supported up to the end of 2019. For the second coverage is complete, but it can be expected that some projects would continue to have impact beyond the final year data is available, 2019.
- 7.4 The main dataset the Business Structures Database (BSD) draws a snapshot each year from the ONS business register. The register has all UK businesses registered for VAT and/ or PAYE income tax and so includes all significant businesses operating in the UK. The annual updating means the BSD provides a wide range of economic variables consistently across businesses and over time, particularly around business age, turnover, employment, sector and survival. The data is at firm-level and linking businesses over time allows changes to be tracked. Also, business address changes can indicate the movement of businesses into and out of an area.

### Firm-level Support and its Impacts

- 7.5 The firm-level CIE covers ERDF projects supporting businesses directly through grants, loans and business advice and guidance. There are two sources for information on the supported businesses, grant claims data as projects submitted details of businesses receiving support and data collected for the study, the beneficiary monitoring data. These two sources of data were first linked to each other with as expected considerable overlap and then matched to the ONS BSD. Appendix E details the compilation process.
- 7.6 The annual BSD snapshots reflect employment and turnover during a financial year, centring on end September, so analysis presented here is by financial year, rather than calendar<sup>11</sup>. The most recent year available in the BSD for this analysis covered financial year 2018/19. This means that analysis is only possible for three annual cohorts supported up to the financial year 2018/19, and for this final cohort treatment effects will only be partially measurable for those supported early in the year. There are 30,600 businesses in this analysis.
- 7.7 In addition, the beneficiary data, at the time of the phase 2 analysis, contained around ten thousand businesses that received support more recently, for which impact data is not yet available. These will be added to the impact analysis when more recent BSD data becomes available for the final stage of the evaluation.

# **Profiling the Supported Enterprises**

- 7.8 Figure 7.1 shows the total employment of the three annual cohorts of supported businesses, starting the year before support and then the available years after support. Totals aggregate across supported businesses by cohort. So, businesses supported in financial year 2018/19 would be matched using BSD data for financial year 2017/18 as this is pre-support covering a year, April 2017 to March 2018, entirely before any of the 12,784 businesses of the cohort are supported. The figure then has employment of these businesses a year later, after support has started and growth should be observable. For the earlier treatment years analysed (financial year 2016/17 is called the 2016 cohort; financial year 2017/18 is the 2017 cohort), there is at least one year of BSD data that is fully after support.
- 7.9 The analysis of the supported businesses indicates some overall findings:
  - The employment across the businesses supported by ERDF is 1,161,620 in the year before support, with the 2016 cohort having 155,000 employees, 2017 cohort having 568,000 and 2018 cohort having 436,000.
  - There is also growth in employment, so that by September 2018, the employment in the businesses is 1,195,455, reflecting an increase of 34,000 jobs.
  - By adding the years of employment in successive cohorts of employment,
     71,400 years of employment was added in the supported businesses.
  - Supported businesses average employment is 38 jobs pre-support. Across the cohorts, the BSD provides turnover measures for the supported businesses.

<sup>&</sup>lt;sup>11</sup> For brevity, financial years are shortened to their start year (so financial year 2016/2017 is referred to as 2016).

Real turnover, deflated using 2019 prices, is £7.5m on average per business, with real turnover per employee at a business averaging £118,000.

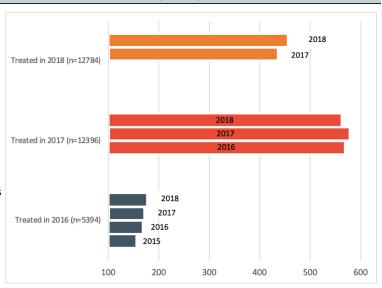
7.10 The new 71,400 years of employment seen in supported businesses suggests economic activity is growing in these businesses. However, these are changes in businesses without evidence of additionality as, at this stage, little can be said about whether the changes observed would have happened without ERDF support. The evidence on this is derived from observing any growth seen in comparable businesses.



The employment in supported businesses is tracked in the year before and years after support. Care is taken to avoid double counting, by removing the businesses supported in earlier cohorts for each subsequent cohort calculation.

Annual total employment is presented here (000s).

For the 2018 cohort, the data shows the level of employment in the year prior to support and that in the year this calculation would equal the new jobs by 2018. However, for businesses supported in 2016, the 12,265 new jobs by September 2016 would represent three years of employment by 2018.



Source: ERDF businesses first supported before financial year April 2019 linked to Business Structure Database; all years are financial years, i.e., 2018 is April 2018 to March 2019, or centred on September, i.e., employment in 2018 is the average of employment across four points from April 2018 to March 2019.

7.11 Identifying similar but unsupported businesses starts by characterising the supported businesses. Figure 7.2 indicates the category of business age for the 11,080 businesses identified in the BSD that received support in financial year 2017/18<sup>12</sup>. Around a half of businesses were in the oldest age category of over ten years, similar to all businesses in the BSD. One form of support differs from this. Older businesses form nearly three quarters of the 662 businesses supported under IP4b: SME Energy Efficiency and Renewable Take Up.

<sup>&</sup>lt;sup>12</sup> The size distribution of these businesses is believed to differ significantly to that for all businesses receiving support due to the exclusion of sole proprietors and the self-employed.

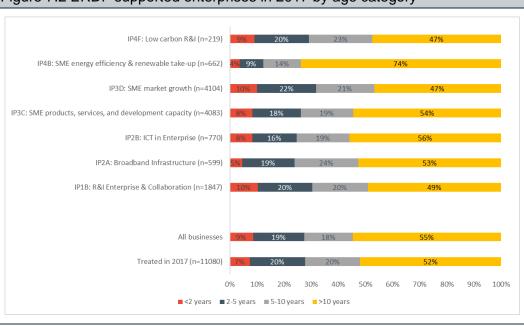


Figure 7.2 ERDF supported enterprises in 2017 by age category

Source: ERDF businesses first supported in financial year 2017/18 linked to Business Structure Database; age as in year before support.

- 7.12 The ONS data is augmented through linking to other firm-level and area-based data. Datasets linked to the ONS data are:
  - Take-up of government innovation support. Innovate UK reports all incidences of Innovate UK support since 2004. This has been linked to the BSD. The fact that a business has received support in the past may reveal a motivation to grow and innovate.
  - Patents registered by companies. The UK Intellectual Property Office
    publishes the patent register online and the owner where a limited entity can
    be linked to the Companies House register and then to the ONS business
    register.
- 7.13 Figure 7.3 highlights how, while the wider BSD has very modest shares of businesses supported by Innovate UK and holding a patent (less than 2%), the ERDF supported businesses in the 2017 cohort are more likely to have these characteristics (nearer 4%) although it remains low overall. The industry mix differs as well, with 13% of ERDF supported businesses being in sectors classified as knowledge intensive, either in manufacturing or services; the wider BSD having nearer 8%.

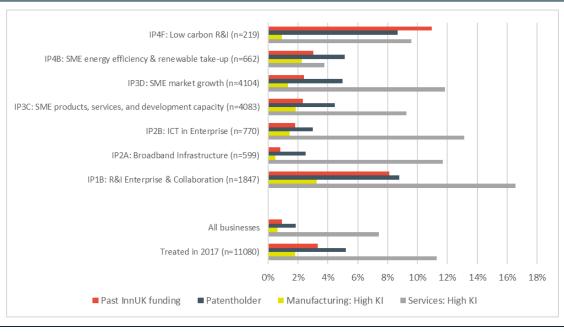


Figure 7.3 ERDF supported businesses indicators of innovation by output, 2017 cohort

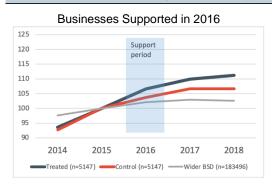
Source: ERDF businesses first supported in financial year 2017/18 linked to Business Structure Database and public database of projects funded by Innovate UK. Knowledge intensive sectors as identified by Eurostat and SQW using indicators of skills mix.

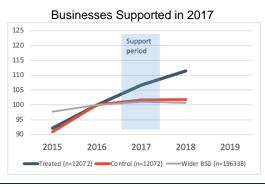
7.14 There is a variation in the indicators of innovativeness by different investment priorities. While the businesses supported by IP2a: (access to broadband infrastructure) look like the wider business population, the investment priorities where research and innovation are the focus are more likely to have received Innovate UK support in the past and hold a patent.

# Additional Employment Impacts and the Performance of Comparable Businesses

- 7.15 The growth in employment, real turnover and real turnover per employee is plotted below. Each figure uses logged variables, so that any outliers do not unduly influence the estimation. In each figure, the performance is indexed and, in the year prior to support, the value is 100. Then, there is a single data point in the middle of the treatment year (based on the observation that BSD data centres on September of the financial year). For the businesses supported in 2016 and 2017, there are then some annual data points after all businesses in each cohort have concluded their support.
- 7.16 Figure 7.4 indicates the employment change for three groups of businesses. The blue line "treated" is the index of employment for supported businesses. Comparable businesses have been identified for each of the three cohorts of supported businesses (see Appendix E). In the 2017 cohort, employment growth, 2016-2018, is 12%, and this is markedly higher than the matched counterfactual and the wider BSD average. In the 2016 cohort, the gap is more modest. The rate of growth is similar in the 2016 cohort, although the post-support period is one year longer compared to the 2017 cohort.

Figure 7.4 Employment change after ERDF support for Supported and Non-treatment businesses, by Year of Support





Source: Analysis of BSD linked to ERDF beneficiaries and other datasets, Belmana

- 7.17 The degree to which the growth rates differ can be tested and this is called the difference-in-difference, estimating how changes in employment (the first difference) then differs between the supported and control groups (the second difference). 0 indicates estimates of this difference-in-difference for all three cohorts:
  - The growth rate is plotted from two years before support (i.e., 2014 for the 2016 cohort) to the most recent year for which data is available. In this period, employment growth is 18.7% for the businesses treated in 2016, with the figure indicating that there was growth before support.
  - After support, a divergence emerges with the supported businesses outpacing the comparable businesses by 3.2% and this difference is significant at 5% confidence levels.
- 7.18 Employment change differs significantly in the other cohorts, with the difference-in-difference indicating the growth that occurred in the supported businesses but did not occur in the matched counterfactual. This is additional growth and between 16-38% of growth seen in the supported businesses is not observed in comparable businesses.

Table 7.5 Estimates of Additional Employment Impacts								
Cohort	Measure	Log	Diff-in-	Additionality				
		Growth	Diff					
Supported in	Emp change, 2014-	18.7%	3.2%	16% of growth is				
2016	2018		(2.13**)	additional				
Supported in	Emp change, 2015-2018	20.8%	8.0%	38% of growth is				
2017			(8.41***)	additional				
Supported in	Emp change, 2016-2018	14.5%	4.6%	32% of growth is				
2018			(5.98***)	additional				

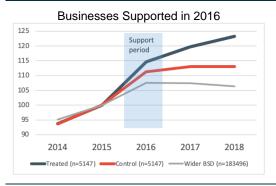
Note: Significance levels are 1% (\*\*\*), 5% (\*\*) and 10% (\*); T-statistics in parenthesis using robust standard errors.

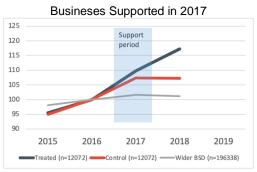
7.19 There were 71,400 years of employment added in the supported businesses. The additionality estimates suggest that 16-38% of the employment was additional, with the central estimate suggesting 19,300 years of employment is additional over the 2015-2018 period, representing about 0.6 years of employment per business.

## Impacts on the Business Turnover and Turnover per Employee of Support

7.20 Impacts of support on the real turnover changes of businesses are indicated in 0. These are constructed in a similar manner to the employment figures.

Figure 7.6 Real turnover change after ERDF support for Supported and Non-treatment businesses, by Year of Support





Source: Analysis of BSD linked to ERDF beneficiaries and other datasets.

- 7.21 The estimates indicate that turnover growth tracks the employment trends, suggesting that as businesses expand their workforce, their sales are growing as well. The growth seen in the 2016 cohort is particularly strong, with it both being significantly different from the control businesses and outpacing employment growth. This latter feature suggests that productivity growth is higher in the supported businesses than comparable businesses.
- 7.22 0 presents these findings. It also highlights a difference in 2017. Here productivity growth is negative for the supported businesses, in that real turnover growth has not expanded at a rate similar to employment. However, the difference-in-difference estimates for turnover and productivity remain positive and significant suggesting that the supported businesses are performing better than comparable businesses.

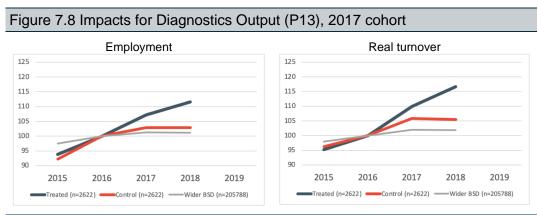
Table 7.7 Estimates of Additional Turnover and Productivity Impacts								
Cohort:	Cohort: Measure Log Growth							
Supported in								
2016	Turnover change, 2015-2018	23.3%	9.1% (4.10***)					
	Real productivity change,							
	2015-2018	3.9%	5.6% (2.92***)					
Supported in								
2017	Turnover change, 2016-2018	17.2%	9.3% (3.72***)					
	Real productivity change,							
	2016-2018	-3.0%	1.2% (3.72***)					

Note: Significance levels are 1% (\*\*\*), 5% (\*\*) and 10% (\*); T-statistics in parenthesis using robust standard errors.

### Impact analysis for ERDF outputs and investment priorities

7.23 Beneficiaries secured various types of support, and this can be analysed both by investment priority and by selected ERDF output codes. Here, analysis for the output

- P13, which measures the number of businesses receiving diagnostic support, is presented for businesses receiving support in 2017. This was selected due to the relatively large sub-sample of businesses receiving this form of support (2,662 out of 12,072 beneficiaries receiving support in 2017).
- 7.24 The analysis by output show a degree of consistency with the overall impacts. Broadly employment and turnover growth is positive and the difference with the counterfactual is positive and significant. As shown in Figure 7.8, the employment change for the businesses supported in P13: Diagnostics is 18.9%, 6.6% greater than the control over the 2016-2018 period. This growth is significantly different from the comparison groups. Turnover growth also is significantly higher for the supported than the counterfactual. However, the real turnover growth per employee remains insignificantly different for the supported from the counterfactual.



Source: Analysis of BSD linked to ERDF beneficiaries and other datasets.

- 7.25 0 provides the results of analysing the employment growth by investment priorities focusing on the period 2016-2018, i.e., a slightly shorter period than the cohort analysis above. Growth is around 20-25% in employment and as the period focuses on the post-support years the difference-in-difference measures slightly higher.
- 7.26 There is a consistent picture across the priorities in terms of the additional growth in employment that is observed. Where sample sizes are large, such as the support focused on SME innovation and market growth, the difference between the estimates is minimal.

Table 7.9 Estimates of Additional Employment Impacts by Investment Priority,	
2017 cohort	

	Investment Priority	Log	Diff-in-Diff	Additionality
	·	Growth		
	R&I Enterprise and Collaboration			55%
1a	(n=1,849)	24.0%	13.1% (5.30***)	_
2a	Broadband Infrastructure (n=599)	7.3%	5.1% (1.33)	69%
2b	ICT in Enterprise (n=771)	25.2%	14.9% (3.96***)	59%
3a	Start-up Support (n=717)	23.9%	15.0% (3.72***)	63%
	SME Products, Services &			
3c	Development Capacity (n=4,083)	22.3%	8.7% (5.38***)	39%
3d	SME Market Growth (n=4,105)	25.7%	13.7% (8.31***)	53%
	SME Energy Efficiency & Renewable			
4b	Take-up (n=662)	20.4%	18.3% (4.44***)	89%

4f	Low Carbon R&I (n=	=219)	21.4%	15.5% (	(2.05**)	72%

Note: Significance levels are 1% (\*\*\*), 5% (\*\*) and 10% (\*); T-statistics in parenthesis using robust standard errors.

7.27 The table above highlights an exception, with the Broadband support's effect on employment being insignificant. Arguably, this is a measurement issue, with this support indirectly impacting firm growth, focusing on an input into business performance (the access to the internet). Whereas other Investment Priorities more directly place businesses on a different growth trajectory, the expansion that can be expected after an improvement to broadband infrastructure may be less measurable in terms of employment.

### Impact of ERDF Place-based Infrastructure Investments

- 7.28 The ERDF programme has supported a wide range of area-based interventions, with 100 projects included in the phase 2 CIE analysis totalling around £247m. Most of these projects fall under priority axis 1 (Research and Innovation) which received £109m of ERDF funding in the period. An example of Research and Innovation funding is the improvement or construction of incubation and research facilities focusing on innovation, often affiliated to a university. Most projects are intended to stimulate business start-up, innovation and employment growth in the targeted areas and further afield. Many of the projects may also result in the relocation of businesses from neighbouring areas. They may also create additional productivity benefits through attracting businesses and concentrating them in one area and thus, benefitting from economies of agglomeration.
- 7.29 0 illustrates the geographical spread of the ERDF funded area-based projects across England which were included in the analysis. The larger circles signify the larger frequency of projects. Cornwall and the Isles of Scilly (13) and the Heart of the South West (11) benefitted from the highest concentration of interventions<sup>13</sup>. Most of the interventions in Cornwall and the Heart of the South West were PA3 projects (Enhancing the Competitiveness of SMEs). Lancashire was next, where most projects were funded through PA6 (Promoting Climate Change Adaptation, risk prevention and management).

<sup>&</sup>lt;sup>13</sup> Local Authority Districts are used instead of LSOAs for mapping purposes in order to create a better visual representation.

Supported areas

Comparison areas

Figure 7.10 Spatial distribution of treatment and control areas

Source: ERDF area-based projects linked using postcode to lower super output areas and local authorities.

7.30 Area-based socio-economic indicators were taken from the 2011 Census, providing information on economic activity, socio-economic status (NS-SEC), ethnicity and size of the area (acreage). The Census data is available for several different geographies and data at the Lower Super Output Area (LSOA) level is extracted. In 2011, there are 32,844 LSOAs in England, with an average population of 1,500. The postcodes for the project from the management information identifies supported LSOAs, and geodetic<sup>14</sup> distances between each "treated" LSOA and all "untreated" LSOAs are calculated using LSOA centroids. The treated areas are then compared to control areas at varying distances from 1km to 10km. Descriptive statistics disaggregated by distance to the project LSOAs are presented in Appendix C. The supported areas have the largest proportion of economically inactive persons. The control areas between 1 to 10 kilometres away seem to have relatively similar characteristics and therefore provide a good comparison.

### **Employment Impacts in Supported Areas**

7.31 This section examines the effect of the area-based interventions on workplace employment in the treatment areas given that schemes have a substantive component designed to create direct and indirect jobs. Newly created jobs may also translate into greater sales and changes in labour productivity in firms directly and indirectly affected. Thus, the effects on employment and turnover are examined between 2014 and 2018. Since the spatial scale of the potential impact is not known, different

<sup>14</sup> Geodetic distance is the length of the shortest curve between two points along the surface of a mathematical model of the earth. These distances were found using the code *geonear* to find the neighbouring areas. Binary variables were created for each kilometre away the control groups were from the treated LSOAs, and this data was then linked to a shape file in order to create the maps in figure 6.3.

- estimates are produced using different distance bands to define whether an LSOA is 'close' to an LSOA benefitting from ERDF area-based intervention.
- 7.32 The main method to estimate impact of the ERDF area-based interventions is spatial and time-differencing similar to recent evaluation work on other place-based programmes. With any evaluation of an economic policy, additionality and displacement need to be investigated. Additionality refers to whether the policy could generate positive outcomes beyond what would have occurred without government intervention.
- 7.33 It is impossible to know what would have happened in any of the chosen locales had they not been allocated ERDF resources for critical infrastructure. In the literature on causal inference (see Heckman et al., 1999, DiNardo and Lee, 2011- see Appendix E), a way of solving this additionality problem is adopted through comparing treated sites and locations with neighbouring areas at various distances as control areas. In addition, businesses might decide to relocate into or close to an ERDF supported facility where their product demand is higher due to the intervention, pulling up employment in nearby areas and down in areas further away (displacement effect).
- 7.34 O presents the coefficients and standard errors when estimating difference-in-differences in the employment and nominal turnover growth from 2014-2018 of businesses located in the areas in which the ERDF projects are located and the surrounding comparator areas. These are firm-level regressions with no control variables. The average growth rates are shown in the left column for the businesses in supported areas. The difference-in-difference estimates the change in log employment for the years 2014-2018 (first difference) against the control areas at varying distances away (second difference). The projects seem to be creating additional employment, the first row of 0 suggests that areas within 1km of ERDF supported LSOAs experience faster employment growth (1.4%) than comparable locations elsewhere in England. The estimates become smaller as firms in LSOAs from further afield are included (1.1% at 10km away). This pattern of results suggests that employment growth mainly occurs within 1km of where the area-based interventions occurred. This positive employment growth is not seen in turnover.

Table 7.11 Difference in Differences Estimates using Control Firms within Varying Distances (2014-2018)

	Average Growth	Difference	Difference-in-Differences Estimates using Control Firms within Varying Distances (%)					
	in Support ed Areas (%)	<10km	<5km	<4km	<3km	<2km	<1km	
Employment Growth	5.2	1.1%***	1.1%***	1.1%***	1.3%***	1.1%***	1.4%***	
(2014-2018)		1.3%	0.3%	0.3%	0.3%	1.2%	1.0%	
Real Turnover	2.5							
Growth		1.5%***	-0.1%	-0.4%	-0.3%	-0.7%*	-1.1%	
(2014-2018)		0.4%	0.4%	0.5%	0.5%	0.5%	0.7%	
Turnover Growth	9.4	2.4%***	0.7%	0.3%	0.3%	-0.1%	-0.6%	
(2014-2018)		0.4%	0.4%	0.5%	0.5%	0.5%	0.7%	

Note: Significance levels are 1% (\*\*\*), 5% (\*\*) and 10% (\*); standard errors below DiDs using robust standard errors; turnover is not deflated.

- 7.35 The analysis has provided evidence that the investments may have resulted in the relocation of businesses. In particular, using the BSD's tracking of firm location, jobs in the supported areas associated with businesses relocating into the area are calculated and these are considered as displaced. The point estimate suggests that LSOAs close to ERDF supported projects added 11,821 jobs from LSOAs elsewhere in England (see 0). This provides an estimate of the net jobs created in the supported LSOAs, of 13,226 jobs. One issue in terms of employment is the possibility of correlation. That is, areas receiving support could also be more likely to receive other public sector assistance so there is a potential that some of the increase in employment numbers could be due to different support measures contributing to growth (including an overlap with the estimated jobs impacts reported in paragraph 6.19 above).
- 7.36 The additional employment compared to neighbouring LSOAs is calculated using the difference-in-difference estimates. As these are modelled, the range of difference-in-difference estimates is used taking the minimum and maximum across the different circles around the supported LSOAs, with for some employment difference-in-difference estimates being negative. Further, the total budgeted ERDF grant of the interventions is known to be £247 million which can be transformed into a unit-cost measure by considering deadweight and displacement of jobs.
- 7.37 0 presents an assessment of the economic impact of the area-based interventions in terms of employment creation to date. It considers deadweight and displacement to come to an estimate of net additional jobs created from the scheme. It shows the upper bound limit of 10,430 jobs can be attributed to the scheme; this implies a cost per additional job of £23,680<sup>15</sup>.
- 7.38 This cost per job is slightly larger than Criscuolo et al (2012) who estimate a cost per net additional job of £6,885 for the UK Regional Selective Assistance and smaller than the estimate calculated by Gibbons et al. (2017) who calculate a cost per job of £39,675 for the Single Regeneration Budget.

<sup>&</sup>lt;sup>15</sup> Additional cost per job is calculated as the total cost of interventions divided by the upper bound job creation estimate.

Table 7.12 Area Based Additionality Calculations							
Gross Jobs Created in		25,047					
Supported Areas (A)		23,047					
Jobs Relocating from Outside		11.821					
Areas (Displaced Jobs) (B)16		11,021					
Net Jobs Created in Supported		13.226					
Areas (C: A-B)		13,220					
Net Additional Jobs Created in	Lower bound	Upper Bound Estimate:					
Supported Areas (C) x two	Estimate: 9,665 <sup>17</sup>	10,428 <sup>18</sup>					
different additionality ratios	L31111ate. 9,003	10,420					

7.39 Modelling additionality is relatively simple at this interim stage, looking at whether there is a difference in average employment growth at firm level between the businesses in the supported area to those located in each circle, i.e., 1, 2, 3, 4, 5 and 10 kilometres away. As noted in Appendix E, matching on firm-level characteristics could be undertaken to improve the comparability of the businesses in the surrounding areas. This will be undertaken for the next stage of the research.

<sup>&</sup>lt;sup>16</sup> This number is the sum of the plant and establishment relocators to treatment areas per project.

<sup>&</sup>lt;sup>17</sup> Lower bound estimate is calculated by choosing the additionality ratio of 73% (5.2-1.4)/5.2 \* 100) estimate from the difference-in-differences analysis in table 7.5 when only control firms within 1km of the supported firms closes neighbouring firms within the supported LSOA.

<sup>&</sup>lt;sup>18</sup> Upper bound estimate is computed the same way as the lower bound but with an additionality ratio of 78% (5.2-1.1)/5.2\*100) estimated from the difference-in-difference analysis which included control firms in LSOAs from within 4 kilometres to the firms in the supported LSOAs

# 8. Implications for the Phase 3 Evaluation

- 8.1 Phase 3 of the national evaluation is due to commence in early 2021 with the detailed planning of the final evaluation phase, the implementation of these tasks throughout 2021, and reporting in the first quarter of 2022.
- 8.2 The third and final phase of the evaluation aims of strengthen the evidence base in three main areas:
  - Summative Assessments: Reviewing a much larger and more comprehensive range of project level summative assessments, with the aim of having sufficient numbers of assessments across all of the main types of investments to provide a much richer source of both quantitative and qualitative evidence relating to delivery and impact including lessons for future approaches.
  - **Beneficiary Surveys**: Providing larger scale, more statistically reliable and representative survey evidence gathered from direct programme beneficiaries, as well as including indirect beneficiaries and longitudinal survey approaches where this is practical.
  - Counterfactual Impact Evaluation: more comprehensive analysis of beneficiary SMEs allowing for a larger sample of firms, improved matching into the ONS's BSD datasets and a longer period of post-support data, as well as additional forms of area based counterfactual analysis to test the impact of selected infrastructure investments.
- 8.3 The three strands of activity will help to improve the evidence relating to the effectiveness, impact and value for money across the programme's specific objectives, priority axes and investments priorities.
- 8.4 In addition, a number of the lessons from the implementation of Phase 2 evaluation have or are being considered by MHCLG in order to improve the gathering of beneficiary data and evidence in order to improve the quality of evaluation in the next phase. These mainly relate to measures to: improve the range and quality of the beneficiary data; improve the quality, transparency and consistency of summative assessments.
- 8.5 In phase 3 of the evaluation, the counterfactual analysis will be able to draw on at least one further year of ONS BDS data will be available (BDS 2020) providing data up to March 2020 (centred around September 2019) and there is the possibility of capturing a second period (BDS 2021) which would include data after the start of the Covid-19 pandemic. There are also a number of forms of additional analysis which will be conducted:
  - Further analysis examining the variations in the additionality of impacts between the different types of activities supported across the main investment priorities, the programme output categories, as well as by LEP area.

- Inclusion in the analysis of the beneficiary SMEs which have received repayable finance from the major financial instruments being supported through the ERDF programme (such as the Northern Powerhouse and Midland Engine SME Investment Funds).
- There will be a wider set of impacts that could be analysed with additional post-support data. The analysis would be able to take account of business survival and improve the analysis of the quality of measured impacts (e.g., employment quality can be assessed by using ONS surveys on pay and occupations).

# **Appendices**

# **Appendix A - Overview of Evaluation Methods**

# The English ERDF Programme

A.1 The report presents the main findings from phase two of the national evaluation of the England 2014-2020 European Regional Development Fund (ERDF). The programme has an overall ERDF allocation of £3.2bn (and estimated match funding of £2.5bn) and covers nine Priority Axes<sup>19</sup> (including one for technical assistance). As illustrated in Table A.1, the vast majority of the ERDF allocation (84%) is located in just three priorities focused on promoting research and innovation, enhancing the competitiveness of SMEs and supporting the shift to the low carbon economy. The Priority Axes focused on adapting to climate change, protecting the environment and promoting social inclusion have relatively modest allocations. Priority Axis 7 is specific to sustainable transport in Cornwall and the Isles of Scilly, which is the only less developed region in England.

Table A.1 ERDF Allocation by Priority Axis				
Priority Axis	Notional Allocation (£million)			
PA 1: Research and Innovation	727.5			
PA 2: ICT	100.5			
PA 3: SME Competitiveness	1,415.3			
PA 4: Low Carbon Economy	685.3			
PA 5: Climate Change Adaption	74.3			
PA 6: Protecting the Environment	77.6			
PA 7: Sustainable Transport in Cornwall and IoS	52.3			
PA 8: Promoting Social Inclusion	32.4			
PA 9: Technical Assistance	131.1			
Total	3,296.4			

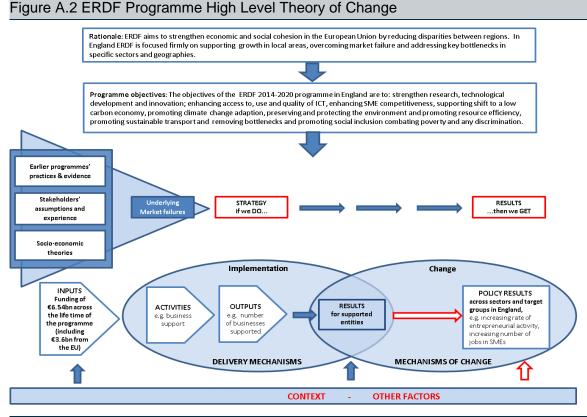
Source: MHCLG, Performance Pack, January 2020; note: figures may not sum due to rounding; exchange rate: 0.9033

<sup>&</sup>lt;sup>19</sup> A tenth priority was introduced in August 2020 in response to the economic challenges arises from the Covid-19 pandemic.

- A.2 The ERDF programme is focused on a wide range of types of investment across the Priority Axes and Investment Priorities (of which there are nineteen and a slightly larger number of Specific Objectives). More than 1,000 projects are expected to be grant funded during the life of the programme, supporting a mix of direct and indirect beneficiaries. Many of the direct beneficiaries will have received advice, guidance or finance often associated with setting up or improving the competitiveness of businesses, whilst a range of supporting investments will indirectly support a range of beneficiaries and help contribute to enhanced local economic growth in a variety of ways.
- A.3 All areas of England are eligible for ERDF funding, with the level of funding determined by each NUT3 region's classification on the European Commission's definition of economic need (i.e., less developed, transitional and more developed). However, an aspect of the ERDF programme which is specific to England is the role of the thirty-eight LEPs in determining the economic priorities for their areas and the setting of the priorities for the use of the Structural Funds (alongside domestic resources). The Managing Authority for the English Programme (MHCLG) chose to integrate the EU's three categories of region (less developed, transitional and more developed) into a single all-England programme. This has led to a distinct approach to the determination of priorities and the commissioning and contracting of ERDF funded projects. This approach has an implication for the spatial dimension of the national evaluation.

# **Approach to the Evaluation**

- A.4 The evaluation plan for the ERDF 2014-20 Operational Programme for England states that the purpose of the evaluation is to "test and understand a) the process of implementation and delivery of the projects funded through the ERDF programme and b) if and how this has directly resulted in the intended outcomes and impact."
- A.5 The evaluation plan sets out the theory of change for the programme (see Figure A.2) which in turn has helped to shape the structure and approach of the evaluation. This sets out the relationship between economic and policy context, rationale for intervention and programme design, activities and outputs, impacts and economic change (the results).



Source: Draft English ERDF 2014-20 Evaluation Strategy, October 2016, DCLG

- A.6 The Evaluation Scoping Report<sup>20</sup> translated this theory of change into a number of strands of interrelated and complementary strands of activity:
  - Review of the continued relevance, appropriateness and consistency of the ERDF programme given changes in the economic conditions and policy context
  - Review of programme financial and output progress of the programme compared to the agreed targets
  - Process evaluation focused on the efficiency and effectiveness of the approaches to the delivery, management and governance of the programme
  - Impact evaluation examining the economic impacts which are attributable to the ERDF investments for the programme as a whole and within each of the Priority Axes and the associated intervention types
  - Economic evaluation focusing on measuring the cost-effectiveness of the different Priorities Axes and intervention types.
- A.7 The evaluation plan sets out specific research questions which the evaluation is intended to answer. These questions have been organised around the evaluation strands which we have adopted for the national evaluation. The appendix also

<sup>&</sup>lt;sup>20</sup> Scoping of the National Evaluation of the 2014-2020 ERDF Programme for England, Regeneris Consulting for Ministry of Housing, Communities & Local Government, January 2018

- summaries the research questions we expect to be able to answer in the Phase Two report.
- A.8 An initial Phase 1 report, produced in January 2019, focused on the continued relevance and consistency of the ERDF programme and its financial and output progress at that time. The Phase 1 report<sup>21</sup> examined the efficiency and effectiveness of the approaches to the delivery, management and governance of the programme. Many of the recommendations from these two reports have been implemented by MHCLG see Section 2.
- A.9 This report presents the findings from Phase 2 of the evaluation. It provides an update on the overall financial and output delivery progress of the programme, an assessment of the continued relevance and consistency of the programme strategy. It also provides the first evidence from the evaluation of the emerging outcomes and impacts that the programme is helping to support amongst direct beneficiaries and in local economies, plus the experiences of the beneficiaries of the support they have received. An important aspect of Phase 2 has been the testing of economic impact approaches which will be rolled out fully during Phase 3.
- A.10 The evaluation provides evidence up to the end of 2019, although a snapshot of financial and output data is provided up to the end of Quarter 1 2020. Consequently, phase two of the evaluation is setting out the picture in terms of delivery and emerging impact of the ERDF programme prior to the Covid-19 lockdown in mid-March 2020. Whilst the surveys of business beneficiaries focused on the support from ERDF projects prior to the summer 2019, the surveys were conducted between May and September 2020 and hence during a period when these businesses may have been affected by the business consequences of the pandemic lockdown.

<sup>&</sup>lt;sup>21</sup> The final Phase 1 report was submitted to MHCLG in July 2019

### **Evaluation Themes and Activities**

A.11 0 below provides a summary of the main evaluation themes and activities covered in Phase Two.

Table A.3 Phase 2 E	Table A.3 Phase 2 Evaluation Themes and Activities							
	Desk Base Analysis	Consultations	Review of Project Summative Assessments	Beneficiary Surveys	Counterfactual Impact Analysis			
Focus of Activity	Analysis of economy, policy & programme performance	Limited consultations in Phase 2, restricted to MHCLG delivery & policy staff. Covering range of programme and priority	A review of 81 project summative assessment to provide bottom- up evaluation evidence. Focused on PA 1, 3 & 4 due to higher spend and greater progress here	Surveys of business beneficiaries (inc self-employed & and aspiring entrepreneurs) covering R&I, SME Comp and Low Carbon Economy Support. c4,200 interviews	Analysis of the performance of employer above VAT threshold receiving ERDF support compared to matched nontreatment businesses.  Covered 66,400 businesses			
Review of Relevance	XXX	Χ	X					
Review of Programme Progress	XXX	XXX	Х					
Process Evaluation	X	XXX	XXX	XX				
Impact Evaluation	X	Х	XXX	XXX	XXX			

# Review of Continued Relevance/Consistency of the ERDF Programme

- A.12 In terms of the overall programme theory of change in 0, this relates to the contextual policy and economic conditions which contributed to the design of the programme's goal specific objectives and investment priorities.
- A.13 The review of the continued relevance and consistency of the programme undertaken in Phase 1 has been updated. Whilst the focus is on changes prior to the Covid-19 pandemic, the implications of this for the programme and the changes which have been implemented are noted. The phase 3 report will examine in detail the implications of Covid-19 for the focus and delivery of the ERDF programme, of economic conditions and changes in policy.

# **Review of Programme Performance**

- A.14 In terms of the overall programme theory of change above, this relates to the implementation of the programme, examining the inputs, activities and output and outcomes against targets. It also considers progress against the programme's result targets which provide an indication of the changes in baseline conditions which the programme has prioritised given its investment priorities.
- A.15 The review of programme performance primarily focuses on the position up to the end of 2019, with additional information from the more recent period added in

- selectively to provide early insights into emerging performance relating to the COVID-19 pandemic. The review updates the information provided in the Phase 0 report as well as including messages from the analysis of claims data that has been provided by MHCLG which allows us to dive deeper into the performance with relation to specific priority axis and investment priorities.
- A.16 The review has also updated the progress the programme has made up to the end of 2019 against the overall programme results targets. These are the targets which are set for changes in key baseline socio-economic indicators that the programme is intended to contribute towards.

### **Review of Summative Assessments**

- A.17 In terms of the overall programme theory of change above, this relates to the project level evidence which is available through the completed summative assessments. It provides insight into the implementation of ERDF funded projects, the manner in which these are contributing to the objectives of the programme and the lessons which can be learnt at this stage.
- A.18 Phase 2 included a review of findings from a sample of project summative assessments (SAs). The Summative Assessments are a contractual requirement of all contracted projects, with the scope, approach and level of resource required being clearly set out in the Summative Assessment guidance issued by MHCLG. The assessments cover: the continued relevance and consistency of the project; performance against financial and output targets; delivery and management processes; economic impacts; and value for money.
- A.19 By January 2020, 186 summative assessments had been received by MHCLG and shared with the evaluation team (see Table A.4). The phase two review has sampled 81 of these summative assessments, representing 44% of those received to date. The total ERDF grant awarded to the sampled projects is £212.5m (an average of £2.6m) which represents 62% of ERDF grant awarded to all 186 projects for which summative assessments have been received (and around 10% of all ERDF money awarded to projects at the end of January 2020).
- A.20 The summative assessments were selected across the Priority Axis in order to ensure a spread of projects across the Priority Axis, subject to the actual availability of the SAs across the axis. At this stage, the vast majority of assessments reviewed are for projects funded through Priority Axes 1, 3 and 4 (72), with relatively few from the other axes (9). The selection also sought to ensure a reasonable coverage across investment priorities.
- A.21 There was also a degree of targeting on larger projects, in order to both maximise the level of ERDF grant covered, as well as a recognition that larger projects (at least in some priorities) are expected to apply more rigorous evaluation techniques.

Table A.4 Summative Assessment Available and Reviewed by Priority Axis

Priority Axis	No of SAs	SAs Sampled	%	Value of SAs (£m)	SAs Sampled (£m)	% of SAs
PA 1: Research and Innovation	55	30	55%	£85.4	£63.6	74%
PA 2: ICT	8	4	50%	£18.2	£15.8	87%
PA 3: SME Competitiveness	88	30	34%	£185.7	£97.7	53%
PA 4: Low Carbon Economy	20	12	60%	£27.1	£16.4	60%
PA 5: Climate Change Adaption	1	1	100%	£0.5	£0.5	100%
PA 6: Protecting the Environment	3	2	67%	£1.9	£1.2	62%
PA 7: Sustainable Transport	2	2	100%	£17.3	£17.3	100%
PA 8: Promoting Social Inclusion	1	0	0%	£1.9	£0.0	0%
PA 9: Technical Assistance	8	0	0%	£3.0	£0.0	0%
Total	186	81	44%	£341.2m	£212.5m	62%

Source: Review of 81 Summative Assessments; MHCLG, Project Tracker, January 2020

- A.22 The quality of the 81 assessments was judged by the evaluation team to be mixed, with 19 assessed as good, 32 moderate and 30 were considered to be weak. In general, quality standards achieved did not always reflect the scale of the project and hence the resources which should have been available for evaluation<sup>22</sup>. In terms of the variation by policy area the main points are:
  - The summative assessments for SME competitiveness (Priority Axis 3) and research and innovation (Priority Axis 1) projects provided the most useful insights, partly because evaluation in these areas is well-trodden ground.
  - The assessments for some innovation projects were constrained by the time lags in the realisation of business impacts and the ability to capture these given the timing of the assessments.
  - The assessments for infrastructure projects such as transport, land & property development (of which relatively few were covered in our review) provided the least useful insight of impact and value for money due to the contractual frameworks for these projects typically not covering business related outputs and the longer-term nature of the impacts.
- A.23 Appendix C provides the full details of the review including recommendations for improving the monitoring of projects and conduct of the summative assessments. As reported elsewhere in the report, many of these recommendations have already been implemented by MHCLG.
- A.24 Phase 3 will provide the opportunity to review a much larger number of summative assessments, providing a much more significant number of assessments for each

<sup>&</sup>lt;sup>22</sup> MHCLG's summative assessment guidance suggest 1% of total project budgets should be devoted to summative assessment up to a maximum of £100,000.

of the programme's investment priorities and hence a richer source of project level evidence.

## **Beneficiary Surveys**

- A.25 In terms of the overall programme theory of change above, this is a strand of evidence which indicates the extent to which the project support is enabling the targeted business beneficiaries to achieve change and the manner in which this contributes to the programme's gaols. This includes the manner in which they are engaged, the forms of support received and the extent to which they draw on this in implementing business change.
- A.26 The scoping of the Phase 2 explored the manner in which SME beneficiary surveys could provide a valuable source of large scale data which can inform the process, impact and VFM assessment, as well as strengthening the counterfactual impact assessments. The approach recognises the limitations in the use of beneficiary surveys in providing self-reported evidence of outcomes. There is nevertheless merit in undertaking surveys given the scope to collect quantitative and qualitative information in a consistent format about the motivations, contribution of the support to business change and the levels of satisfaction.
- A.27 As outlined in Table A.5 below, the surveys were aligned to the types of interventions being funded across the programme's priority axes, recognising that there is a degree of overlap.

Table A.5 Coverage of Programme Intervention Themes and Investment Priorities in the Beneficiary Surveys

·	Broad Types of Support:					
	Research &	Entrepreneur	Start-up	SME	Resource 8	
	Innovation	Support	Business	Competitiveness	Energy	
	Support	(IP3a, IP8d)	Support	Support	Efficiency	
	(IP1b, IP4f)		(IP3a, IP8d)	(IP2b, IP3c,	Support	
Focus of survey:				IP3d)	(IP4b, IP6d)	
	Researcher					
Researchers	Survey					
		Entrepreneur				
		& Start-up				
Aspiring entrepreneurs		Survey				
0, , , , , , , , , , , , , , , , , , ,			Entrepreneur			
Start-ups (less than 12			& Start-up			
months)			Survey			
	Research			SME Comp	SME Comp	
	&			Survey	Survey	
	Innovation				Ĭ	
Established SMEs	Survey					

Source: Hatch

A.28 Beneficiary surveys can also be a useful source of evidence for other intervention types (including beneficiaries of energy efficiency treatments including social housing tenants, businesses taking up broadband, businesses benefiting from environmental improvements and researchers in new research facilities). However, given the smaller scale of investment in these interventions and the beneficiaries

often being indirect recipients<sup>23</sup> of the support, it is envisaged that these would be the responsibility of individual grant recipients to implement as part of their summative assessments.

- A.29 Interviews for all surveys were conducted via CATI (Computer-Assisted Telephone interviewing) during the following dates:
  - SME Competitiveness: 13<sup>th</sup> May to 10<sup>th</sup> June 2020
  - Research & innovation: 23<sup>rd</sup> June to 31<sup>st</sup> July 2020
  - Entrepreneur & Start-up: 3<sup>rd</sup> August to 22<sup>nd</sup> September 2020
- A.30 For each survey, contacts were received from MHCLG through the Summative Assessment Data Monitoring Forms (ESIF Form 1-013) which were then collated and formatted by Belmana and checked by BMG. There were some issues with earlier versions of the Data Monitoring Form that meant contacts were difficult to analyse and, in some cases, included erroneous or missing contact information. BMG's removed duplicate and erroneous contacts from the list to arrive at a sample frame of available contacts. The reasons for removal of contacts and implications for the sample are set out in Table A.6 below.

Table A.6 Reasons for Removal of Contacts from the Sample Frame							
	SME	Research &	Entrepreneur				
	Competitivenes	Innovation	& Start-up				
	S	Survey	Survey				
	Survey						
Total Beneficiaries Received	24,878	8,915	29,481				
Invalid Number	276	84	162				
No Number	2,899	2967	11,990				
No name/company name	-	24	106				
Duplicate business	7,465	362	5,524				
No information on database	-	-	3,534				
Total Available Contacts	14,238 (57%)	5,478	8,408 (29%)				
		(61%)					

Source: Hatch and BMG

- A.31 The sample of beneficiaries was skewed towards particular LEP areas, reflecting the differing completeness of the beneficiary data provided by the GDTs to MHCLG policy team. The geographical skew was much greater for the SME competitiveness survey due to this being scheduled sooner than the other two surveys. Once the skew was identified, MHCLG took steps to address the skew in the monitoring data with some but not complete success prior to fieldwork starting for the other two surveys.
- A.32 Once the sample frame was established, BMG piloted each of the surveys and then embarked on the full-scale survey. Repeated call backs were made to contacts until a conclusive call outcome was achieved. These call backs were made at different times and on different days of the week in order to maximise the opportunity to

<sup>&</sup>lt;sup>23</sup> in these instances, the beneficiaries may not have a direct relationship with the projects and hence it is much harder to obtain the details and sample these businesses and individuals as part of a national evaluation

- reach the appropriate person. Once a contact had been called 15 times it was removed from the calling list.
- A.33 0 sets out the original target samples for the proposed phase 2 beneficiaries surveys, as well as the achieved samples. Appendix B provides a fuller explanation of the survey method and achieved response. With the exception of the Research and Innovation survey, the achieved samples were smaller than the targets set. This was due to a combination of fewer beneficiaries being available to survey and the challenges of conducting businesses during the Covid-19 pandemic. It was not possible to undertake the survey of researchers due to there being too few beneficiaries being available at the time.
- A.34 As support is delivered across LEP areas, target quotas were set to achieve a sample that could be analysed by geography. The low number of beneficiaries received for the SME competitiveness survey meant this was not possible to achieve, however a better spread was achieved in the innovation and entrepreneur and new start-ups surveys. This has enabled some sub-national analysis; however, results should be treated with caution.
- A.35 As noted above, the surveys were conducted during the course of the Covid-19 lockdown and the subsequent period when restrictions were eased. Given the difficulties facing businesses at this time, with many working remotely, the response rate was lower than BMG expected and took longer to complete the fieldwork. In light of this (and the lower provision of beneficiaries' contacts by the GDT in some regions), it was necessary to reduce the target for interviews for the SME competitiveness (primarily associated with the sub-sample of resource efficiency beneficiaries within this) and start-up surveys.

	Estimated	Target Sample	Beneficiarie	Achieved
	Beneficiaries	(at 95% confidence level)	s Received	Survey
	(mid 2019)	(at 50 % confidence level)	(June 2020)	Sample
Researcher Survey	216	50	-	Survey not
tooodioner curvey	210	(23% of beneficiaries) +/- 12.8		conducted
Research & Innovation	5,100	1,000	5,478	1,003
Support Survey	,	(20% of beneficiaries)	·	
		+/- 2.78		
Entrepreneur & Start-up Survey:				
- Potential entrepreneurs	15,600	1,450 (9% of	8,408	730
		beneficiaries)		
		+/- 2.45		
New business supported	13,600	950		422
		(7% of beneficiaries)		
		+/- 3.07		
SME Competitiveness Survey	27,800	2,500	14,238	2,125
		(9% of beneficiaries)		
		+/- 1.87		
of which Resource/Energy	6,400	c 500 (8%; included in	591	88
Efficiency		SME Comp survey)		
		+/- 4.21		

Source: Hatch and BMG Research

- A.36 There were some issues raised during the process of collating contacts and undertaking the surveys which are set out below:
  - In order to reduce the average interview length of the interview for the SME Competitiveness Survey, it was decided to obtain some SME profile information from an alternative, secondary source to the survey. Respondents were asked if they were happy to link their contact details with other data sources and, if they agreed, were asked to provide their Company Registration Number and/or registered Company Name so that their legal status, sector, year established, and turnover information could be obtained via Company's House rather than through the survey questions. In total, profile information was obtained for 1,657 cases. This includes 455 that answered the profile questions during the interview and 1,202 for whom information was obtained from the secondary source. In total information is missing for 556 cases because although they agreed to have their data linked to other sources, they did not provide the reference information necessary for the data to be linked.
  - Following this experience with the SME competitiveness survey to gathering business profile data, the approach to the innovation survey was amended whilst it was in the field which helped to reduce the extent of the issue. Business profile information was obtained for 902 cases (581 that answered the profile questions during the interview and 321 for whom information was obtained from the secondary source). There is however missing business profile data for 101 respondents although they agree to have their data linked to other sources, they did not provide the reference information necessary for the data to be linked.
  - The original version of the questionnaire used for the SME competitiveness survey resulted in an average interview length significantly in excess of 30 minutes and steps were taken following the pilot interviews to reduce the length of the interview. The amendments made by BMG resulted in one of the additionality questions being missed for 1,400 respondents. Telephone and online rework conducted by BMG to rectify the issue resulted in 880 responses to this question being obtained retrospectively, leaving missing data for 529 cases.
  - The support for existing start-ups and entrepreneurs survey sample was divided into two types of beneficiaries: existing start up individuals that had already launched a business venture, and potential entrepreneurs individuals that were preparing to launch a business venture or exploring the possibility or feasibility of doing so. The available ERDF monitoring data allocated contacts to one of the types. Survey respondents were also asked which of these types of beneficiaries they considered themselves to be. The database information and the self-reported survey response were not consistent for all cases. While the sample was fairly evenly distributed across the two types based on the monitoring information, it was biased towards the potential entrepreneurs group based on survey responses (730 compared to 422 respectively).

### **Counterfactual Impact Evidence**

- A.37 As well as understanding the performance of supported businesses and areas, the counterfactual analysis assesses what would have happened without support by looking at comparable but unsupported businesses and areas as a benchmark. The counterfactual impact analysis (CIE) has two strands, the first looking at firm-level employment and turnover impacts and the second considering the impact of area-based business infrastructure investments.
- A.38 Unlike the beneficiary surveys, the firm level CIE focuses on business beneficiaries that are registered (with Companies House, and for VAT or PAYE). This excludes the self-employed and businesses early in their growth, although some may be picked up in the Phase 3 analysis (and any follow-on analysis). It will also include, unlike the surveys, businesses which have closed and been dissolved.
- A.39 Businesses first supported in financial years 2016/17, 2017/18 and 2018/19 have been linked to ONS firm-level data contained in the Business Structure Database (BSD). The annual BSD snapshots reflect employment and turnover during a financial year, centring on end September of each year. The most recent year available in the BSD covered financial year 2018/19. There are 30,600 businesses in this analysis with this reflecting about 55-60% of the relevant SME beneficiaries available through the ERDF monitoring data at the end of 2019. Key characteristics of the datasets were:
  - The focus on business level support available through four main priority axes and investment priorities:
    - IP1b in priority axis 1 (Research and Innovation) which provides innovation support to businesses;
    - IP2a (Broadband Infrastructure) and PA2b (ICT in Enterprises) which provides ICT support to businesses;
    - IP3c (SME Product, Services and Development Capacity) and PA3d (SME Market Growth) which provides business support to SMEs to help them grow and improve their competitiveness; and
    - IP4b (SME Energy Efficiency and Renewable Take Up) which provides energy efficiency support to SMEs
    - IP4f which provides support to help SMEs to innovate in low carbon technologies, products and services.
  - The employment across these businesses was 1,160,000 jobs in the year before support (an average of 38 jobs). Real turnover, deflated using 2019 prices, is £7.5m on average per business, with real turnover per employee of £118,000.
- A.40 A second CIE approach focuses on area-based interventions including sites, business premises and incubators, and transport schemes (with the later only occurring in Cornwall and the Isles of the Scilly). Whilst the ONS BSD supports this approach as well, it is also supplemented by the use of area statistics. The focus is small area level employment, turnover and productivity growth compared with

- unsupported areas at varying distances from the location of the investment. Spatial and time-differencing (i.e., comparing differences between areas over time) are used as part of this analysis.
- A.41 The ERDF has supported a wide range of area-based interventions with around £247m of ERDF backed investment included in this phase of the analysis. The investment was focused, in terms of number of projects and value, mainly on research facilities, incubators and business premises. The schemes examined also include a small number of broadband infrastructure, transport and flood defence schemes.

#### **Overview**

- A.42 Phase 2 of the evaluation has been successfully implemented and has provided a rich source of evidence at this stage. There are a few points to note:
  - The review of summative assessments has been constrained to some extent in this phase due to having fewer assessments to review than expected and issues with the quality of the assessments. However, as outlined in section 2 below, steps have been put in place by MHCLG and the evaluation team to help address these issues.
  - Whilst the beneficiary surveys have collected extensive evidence from key beneficiary types for the programme in the face of the challenges of Covid-19, the response to the SME Competitiveness survey is heavily skewed to a third of the LEP areas. This largely reflects the spatial pattern of available monitoring data at the time of this particular survey. This issue has now been addressed MHCLG and is not expected be an issue in phase 3 surveys.
  - Neither the surveys nor the CIE analysis included the beneficiaries from the major SME investment funds. These are expected to be a major source of business and economic impact, and this is confirmed by the survey evidence which has covered a number of the smaller business finance projects. MHCLG is taking steps to ensure the inclusion of these beneficiaries in the phase 3 analysis.
  - The CIE analysis has successfully tested two main types of analysis (firm level business support and area-based business infrastructure investments), with the firm level analysis providing level 3 evidence on the Maryland Scientific Scale. Finer grained analysis will be undertaken during phase 3 to better understand the contribution of different types of business support and area based investments in generating additional economic benefits, as well as relating this the units of the support types to generate robust measures of value for money (where appropriate).
  - Given the limitation placed on the scope of the counterfactual analysis by the timing of phase 3, it may be possible to reduce the amount of additional beneficiary monitoring data which is captured from projects and hence reduce the information burden placed on them. This needs to be investigated further by the evaluation team.

# **Appendix B - Detailed Analysis of Programme Delivery Performance**

## **Financial Progress by Category of Region**

B.1 As shown in Table B.1, there has been most progress made in the Less Developed Category of Region which has seen 77% of allocated expenditure contracted raising to 108% of programme value when pipeline is included.

Table B.1 Committed and Pipeline Expenditure by Category of Region, end Q1 2020						
Allocation Commit- % Commitment %						
	ment Allocation + Pipeline					
Less Developed	£419m	£324m	77%	£451m	108%	
Transition	£965m	£648m	67%	£907m	94%	
More Developed	£1,850m	£1,285m	69%	£1,722m	96%	
Total	£3,233m	£2,256m	70%	£3,131m	97%	

Source: MHCLG, Growth Programme Board ERDF Progress Update to 31st March 2020

#### Value of Project Pipeline

B.2 The project pipeline, or applications under consideration, are broken down across the three stages of development as detailed in Table B.2 below.

Table B.2 Project Pipeline, end January 2020					
ERDF Value % of					
	(£million)	Pipeline			
Outline Applications	638	66%			
Full Applications	256.1	27%			
Approved subject to Grant Funding Agreement	68.7	7%			
All Applications under Consideration	962.8	100%			

Source: MHCLG, Performance Pack, January 2020; note: figures may not sum due to rounding; exchange rate: 0.9033

B.3 The breakdown of the project pipeline between the Priority Axes is set out in Table B.3 below.

Table B.3 Project Pipeline by Priority Axis, January 2020						
Outline Full Approved Total						
Application Application subject to Pipeline						
	(£million)	(£million)	GFA	(£million)		
(£million)						
PA 1: Research & Innovation	129.5	77.1	31.2	237.8		

	Outline	Full	Approved	Total
	Application	Application	subject to	Pipeline
	(£million)	(£million)	GFA	(£million)
			(£million)	
PA 2: ICT	19.9	4.1	6.7	30.7
PA 3: SME Competitiveness	252.0	92.9	21.4	366.3
PA 4: Low Carbon Economy	181.1	72.8	7.7	261.6
PA 5: Climate Change	16.4	3.7	0.0	20.2
Adaptation				
PA 6: Protecting the Environment	13.7	2.4	1.7	17.9
PA 7: Sustainable Transport	24.9	2.7	0.0	27.6
PA 8: Social Inclusion	0.0	0.0	0.0	0.0
PA 9: Technical Assistance	0.5	0.3	0.0	0.8
Total	638.0	256.1	68.7	962.8

Source: MHCLG, Performance Pack, January 2020; note: figures may not sum due to rounding; exchange rate: 0.9033

- B.4 Table B.4 shows the project approval rates by priority axis up to January 2020. The analysis shows that the overall approval rate is at 36% (excluding pending projects), which has remained relatively stable with the rate for Jan 2019 to 2020 at 37%. Key points by priority axis include:
  - Priority axis 4 is significantly lower at 24% for the whole period which reflects
    difficulties applicants have raised with PA4 such as complicated eligibility rules
    and this being a relatively nascent intervention area. A lot of these issues have
    since been addressed through OP programme modifications and awareness
    campaigns which is reflected in the improved rate for the period January 2019
    to 2020 of 32%, although still lagging behind the average.
  - PA8 has seen the highest approval rate of 93%, however, this is not surprising given the small pool of public sector applicants and standardised model of delivery.
  - PA5 and PA6 approval rates have improved significantly (11% points and 8% points respectively). These are areas that struggled in terms of committed expenditure early on but have since started to pick up which may be driving this improvement.

Table B.4 Project Approval Rates (excluding pending projects) by Priority Axis, January 2020						
	Projects	Projects	Approval	Approval Rate		
	Approved Rejecte Rate (All) (Jan 2019 to					
d Jan 2020)						
PA 1: Research & Innovation 236 302 44% 41%						

	Projects	Projects	Approval	Approval Rate
	Approved	Rejecte	Rate (All)	(Jan 2019 to
		d		Jan 2020)
PA 2: ICT	31	36	46%	50%
PA 3: SME Competitiveness	331	667	33%	36%
PA 4: Low Carbon	129	407	24%	32%
PA 5: Climate Change Adaptation	20	37	35%	56%
PA 6: Protecting the Environment	45	68	40%	48%
PA 7: Sustainable Transport	6	9	40%	N/A
PA 8: Social Inclusion	43	3	93%	N/A
PA 9: Technical Assistance	46	30	61%	13%
Total	887	1559	36%	37%

Source: MHCLG, Q Tracker, January 2020; note: approved projects include live projects and grant funding agreements, rejected projects also include withdrawn projects; key: green - 10% points or more above the average, red - 10% points or more below the average, black - within 10% points of the average

#### **Contracted ERDF Grant by Category of Region and Priority Axis**

- B.5 As shown in Table B.5 there is a wide degree of variability within the categories of region by Priority Axis with some following the broad pattern described above but some with stark differences:
  - For the Less Developed category of region (i.e., Cornwall and the Isles of Scilly), 70% or more of the notionally allocated funding has been contracted for the majority of Priority Axes. However, for PA 7 only 57% of the allocated funding has been contracted to date, this is due to a major project currently awaiting sign off with the European Commission.
  - For PA 8, contracted funding is 10 percentage points or more above the average for all categories of region, however this is largely due to the requirement that all PA8 projects had to be live by the end of 2019.
- B.6 Contracted funding is 10 percentage points or more below the average for the More Developed category of region for Priority Axes 2, 5 and 6:
  - For PA2, although contracted value is currently low, there are a few small applications in the pipeline with a value of around £10m in total which could bring this back in line with the average.
  - For PA5 there are no projects in the pipeline. This is partly due to there being low requirements for flood protection in many areas. For More Developed areas projects are also restricted to localities with a limited concentration of businesses.
  - For PA6, the majority of funding in More Developed regions is concentrated in 3 LEP areas and forms part of their SUDs which have been delayed extending the time period for delivery and back-loading contracted expenditure.

Table B.5 Contracted Expenditure by Category of Region and Priority Axis, January 2020

Priority Axis	Category of Region	Programme	ERDF	% of
		Allocation	Contracted	Allocation
		(£million)	(£million)	
PA1: Research &	Less Developed	82.3	62.8	76%
Innovation	More Developed	434.1	266.5	61%
	Transition	211.1	147.5	70%
PA2: ICT	Less Developed	17.2	13.2	77%
	More Developed	63.7	36.3	57%
	Transition	19.7	11.7	59%
PA3: SME	Less Developed	156.2	114.5	73%
Competitiveness	More Developed	785.0	581.1	74%
	Transition	474.1	314.3	66%
PA4: Low Carbon	Less Developed	68.7	51.1	74%
	More Developed	440.8	271.6	62%
	Transition	175.9	94.2	54%
PA5: Climate	Less Developed	11.3	8.8	78%
Change	More Developed	22.0	12.4	56%
	Transition	41.0	30.2	74%
PA6: Environment	Less Developed	11.6	10.2	88%
	More Developed	47.7	24.8	52%
	Transition	18.3	11.4	62%
PA7: Transport	Less Developed	52.3	29.8	57%
	More Developed	0.0	0.0	-
	Transition	0.0	0.0	-
PA8: Social	Less Developed	10.2	8.8	86%
Inclusion	More Developed	16.3	14.3	88%
	Transition	5.9	5.4	92%
PA9: Technical	Less Developed	16.5	11.6	70%
Assistance	More Developed	76.0	55.4	73%
	Transition	38.7	26.7	69%
All	Less Developed	426.2	310.9	73%
	More Developed	1,885.5	1,262.2	67%
	Transition	984.6	641.4	65%

Source: MHCLG, Performance Pack, January 2020; note: figures may not sum due to rounding; exchange rate: 0.9033; key: green - 10% points or more above the average for the CoR, red – 10% points or more below the average for the CoR, black – within 10% points of the average for the CoR

#### **Performance against the Performance Framework**

B.7 Table B.6 below shows performance against the Performance Framework expenditure targets for 2023 (figures include match funding). Performance against these targets, both in terms of Priority Axis and category of region, are varied and generally reflects the rate at which activity has been contracted. Most notably:

- There has been better progress towards meeting 2023 targets for the Priority Axes with the largest allocations of grant, namely Priority Axis 1 and 3 for all categories of region.
- Whilst there has been good progress in the Less Developed region for PA 4, this has not been matched in the other two categories of region.
- There has also been good progress in the Less Developed Region for PA 7, where more than half of the total performance framework expenditure target has been claimed.

Table B.6 Performance Framework Expenditure Claimed from the European Commission by Category of Region and Priority Axis, January 2020

Priority Axis	Category of Region	2023 Total	Claimed	% of
		Expenditure	from EC to	Target
		Target	Date	
		(£million)	(£million)	
PA1: Research &	Less Developed	102.9	32.7	32%
Innovation	More Developed	865.3	248.2	29%
	Transition	336.0	148.7	44%
PA2: ICT	Less Developed	21.5	8.7	40%
	More Developed	127.3	36.5	29%
	Transition	32.1	7.3	23%
PA3: SME	Less Developed	194.4	92.8	48%
Competitiveness	More Developed	1,564.0	658.1	42%
	Transition	791.0	306.0	39%
PA4: Low Carbon	Less Developed	85.0	50.7	60%
	More Developed	879.0	201.5	23%
	Transition	303.4	48.0	16%
PA5: Climate	Less Developed	15.0	0.6	4%
Change	More Developed	46.8	5.7	12%
	Transition	71.5	5.9	8%
PA6: Environment	Less Developed	14.5	4.8	33%
	More Developed	101.6	14.3	14%
	Transition	32.2	5.6	17%
PA7: Transport	Less Developed	65.4	35.0	54%
	More Developed	-	-	-
	Transition	-	-	-
PA8: Social	Less Developed	12.0	0.9	7%
Inclusion	More Developed	29.3	2.2	8%
	Transition	8.9	0.3	3%

Source: MHCLG, Performance Pack, January 2020; note: figures may not sum due to rounding; note: this includes both ERDF and match; note: this excludes PA9; exchange rate: 0.9033; key: green - 10% points or more above the average for the CoR, red – 10% points or more below the average for the CoR, black – within 10% points of the average for the CoR

#### **Claims Paid**

B.8 The total value of claims paid by the Managing Authority to grant recipients to the end of January 2020 is £974 million (30% of total programme allocation). Table B.7 shows the claims broken down by priority axis. As with claims made to the EC in the table above, priority axes 5 and 8 are all particularly lagging in terms of claims made by grant recipients, although this largely reflects the later contracting of the projects in these particular priorities.

Table B.7 Financial Progress by Priority	Axis, January 2	020	
	Programme	ERDF	% of Allocation
	Allocation	Claims Paid	
	(£million)	by MA	
		(£million)	
PA 1: Research & Innovation	727.5	223.0	31%
PA 2: ICT	100.5	31.3	31%
PA 3: SME Competitiveness	1,415.3	478.1	34%
PA 4: Low Carbon Economy	685.3	151.1	22%
PA 5: Climate Change Adaptation	74.3	5.5	7%
PA 6: Protecting the Environment	77.6	14.7	19%
PA 7: Sustainable Transport	52.3	25.3	48%
PA 8: Sustainable Inclusion	32.4	2.1	6%
PA 9: Technical Assistance	131.1	42.6	32%
Total	3,296.4	973.7	30%

Source: MHCLG, Performance Pack, January 2020; note: figures may not sum due to rounding; note: these figures do not include match funding, therefore may differ from Table B.6; exchange rate: 0.9033; key: green -10% points or more above the average, red – 10% points or more below the average, black – within 10% points of the average

#### **Performance Against Output Targets**

- B.9 Table B.8 below shows the progress against the 2023 performance framework output targets for each Priority Axis. As shown in the table, the majority of priority axes have already contract outputs equal to or in excess of the targets for 2023. Only one indicator is currently contracted to less than 75% of the performance framework target PA2 number of enterprises receiving support (Transition and More Developed only).
- B.10 Compared to financial progress for notable Priority Axes, this compares as follows:
  - In a number of Priority Axes, output targets are being achieved at a faster rate than expenditure contracted. PA1 (Research & Innovation) shows significant overperformance against target outputs (131%) despite showing normal performance in terms of contracted expenditure (80% of allocation). While this is positive in terms of output progress, it draws into question the realism of the targets when they were set. However, this is a difficult area to predict, given the wide range of projects and new markets that some of them are working in.

- The outputs listed under PA7 are also close to achieving the 2023 output targets while only 57% of the total target expenditure has been contracted. Although this appears to indicate under ambitious targets, PA7 projects are largely preplanned infrastructure projects meaning that the targets are clearly set from the start within the OP. In reality, it is due to the fact that construction phase for one large project is still awaiting sign off but that the development phase has already gone ahead with outputs already claimed.
- PA6 has significantly overperformed (165%) on outputs versus relatively poor expenditure performance (69%). This indicates an unrealistic target, however, as with research and innovation, this is a relatively new focus for ERDF making it difficult to set targets.

Priority Axis	Performance Framework Output	Target (2023)	Contracted	% of target
PA1:	Number of enterprises	20,413	26,753	131%
Innovation	receiving support			
PA2: ICT	Number of enterprises	10,602	7,692	73%
	receiving support (Transition			
	and More Developed only)			
	Additional businesses with	2,102	2,200	105%
	broadband access of at least			
	30mbps (Less Developed			
	only)			
PA3: SMEs	Number of enterprises	97,994	105,202	107%
	receiving support			
PA4: Low	GHG reduction: Estimated	343,138	301,138	88%
Carbon	annual decrease of GHG			
	(Tonnes of CO <sub>2</sub> EQ)			
PA 5: Climate	Businesses and properties	8,263	8,171	99%
Change	with reduced flood risk			
PA 6:	Surface area of habitats	1,459	2,406	165%
Environment	supported to attain a better			
	conservation status (ha)			
PA 7:	Total length of reconstructed	13	13	100%
Sustainable	or upgraded roads of which:			
Transport	TEN-T (km)			
	Length of railway with new or	43	43	100%
	enhanced signalling			
	installation (km)			
PA 8: Social	Number of enterprises	1,788	2,348	131%
Inclusion	receiving support			

Source: MHCLG, Performance Pack, January 2020; key: green - over 100% of final target achieved, black - 75% to 100% of final target achieved, red - less than 75% of final target achieved.

B.11 This breaks down across category of region as below in Table B.9. The analysis indicates that the programme is already achieving or exceeding the Performance

Framework Output Targets (>100% target) for over half (62%) of the outputs in terms of the amount contracted. There is no major pattern across the categories of region, aside from the transition areas having slightly slower progress (<75% target achieved) against targets and more developed areas seeing slightly more progress than other categories.

Table B.9 Progress against Performance Framework Output Targets by Category of Region and Priority Axis, January 2020

Priority Axis	Performance Framework Output	CoR	Target (2023)	Contracted
PA1	Number of enterprises receiving support	LD	559	551
PA1	Number of enterprises receiving support	Т	14,163	19,612
PA1	Number of enterprises receiving support	MD	5,691	6,590
PA2	Additional businesses with broadband access of at least 30mbps	LD	2,102	2,200
PA2	Number of enterprises receiving support	Т	1,903	1,388
PA2	Number of enterprises receiving support	MD	8,699	6,304
PA3	Number of enterprises receiving support	LD	2,118	7,460
PA3	Number of enterprises receiving support	Т	41,504	31,740
PA3	Number of enterprises receiving support	MD	54,372	66,003
PA4	Estimated annual decrease of GHG (Tonnes of CO <sub>2</sub> EQ)	LD	23,015	17,843
PA4	Estimated annual decrease of GHG (Tonnes of CO <sub>2</sub> EQ)	Т	82,139	34,941
PA4	Estimated annual decrease of GHG (Tonnes of CO <sub>2</sub> EQ)	MD	237,984	926,088
PA5	Businesses and properties with reduced flood risk	LD	186	189
PA5	Businesses and properties with reduced flood risk	Т	4,884	6,872
PA5	Businesses and properties with reduced flood risk	MD	3,193	1,110
PA6	Surface area of habitats supported in order to attain a better conservation status (ha)	LD	126	714
PA6	Surface area of habitats supported in order to attain a better conservation status (ha)	Т	290	506
PA6	Surface area of habitats supported in order to attain a better conservation status (ha)	MD	1,043	1,186
PA7	Total length of reconstructed or upgraded roads of which: TEN-T (km)	LD	13	13
PA7	Length of railway with new or enhanced signalling installation (km)	LD	43	43
PA8	Number of enterprises receiving support	LD	270	262
PA8	Number of enterprises receiving support	Т	355	368
PA8	Number of enterprises receiving support	MD	1,163	1,718

Source: MHCLG, Performance Pack, January 2020; key: green - over 100% of final target achieved, black - 75% to 100% of final target achieved, red - less than 75% of final target achieved.

#### **Claimed Outputs**

- B.12 Table B.10 below shows the total claims made against key 2023 performance framework output targets for each Priority Axis. In general, performance on outputs claimed versus targets is very mixed with roughly the same number of performance framework targets overperforming the average proportion of claimed expenditure (31% of total expenditure has been claimed to date).
- B.13 PA 2 has overperformed against the additional businesses with broadband access of at least 30mbps output target, with 173% of the 2023 performance framework target claimed to date. Performance against the PA 7 length of railway with new or enhanced signalling installation output target has also been strong, with 100% of the total 2023 performance framework target already claimed.

Table B.10 Summary of Performance against Key Performance Framework Output Targets by Priority Axis, January 2020

Priority Axis	Performance Framework Output	Target (2023)	Claimed to date	% of target
PA1: Innovation	Number of enterprises receiving support	20,413	11,889	44%
PA2: ICT	Number of enterprises receiving support (Transition and More Developed only)	10,602	3,451	45%
	Additional businesses with broadband access of at least 30mbps (Less Developed only)	2,102	3,811	173%
PA3: SMEs	Number of enterprises receiving support	97,994	46,211	44%
PA4: Low Carbon	GHG reduction: Estimated annual decrease of GHG (Tonnes of CO <sub>2</sub> EQ)	343,138	70,112	7%
PA 5: Climate Change	Businesses and properties with reduced flood risk	8,263	351	4%
PA 6: Environment	Surface area of habitats supported to attain a better conservation status (ha)	1,459	330	14%
PA 7: Sustainable Transport	Total length of reconstructed or upgraded roads of which: TEN-T (km)	13	-	0%
	Length of railway with new or enhanced signalling installation (km)	43	43	100%
PA 8: Social Inclusion	Number of enterprises receiving support	1,788	36	2%

Source: MHCLG, Performance Pack, January 2020; key: based on performance compared with expenditure claim performance for that PA: green - 10% points or more above, red – 10% points or more below, black – within 10% points

### **Claimed Outputs by Investment Priority**

B.14 Tables B.11 - B.18 set out performance in the achievement of outputs by investment priority against the Operational Programme Output Targets for 2023.

Table B.11 Performance against Operational Programme Output Targets by Investment Priority for PA1, January 2020						
Investment		Output	Target (2023)	Claimed to	% of	
Priority				date	target	
1a: R&I	C25	Number of researchers				
Infrastructure		working in improved research	863	65	8%	
		facilities				
	P2	Public or commercial buildings				
		built or renovated (sqm)	31,043	9,320	30%	
1b: R&I	C1	Number of enterprises	20.442	11 000	E00/	
Enterprise &		receiving support	20,413	11,889	58%	
Collaboration	C2	Number of enterprises	12 600	2.024	4 E 0 /	
		receiving grants	13,609	2,021	15%	
	C3	Number of enterprises				
		receiving financial support	695	-	0%	
		other than grants				
	C4	Number of enterprises	6,109	10,065	165%	
		receiving non-financial support	0,109	10,000	103 /6	
	C5	Number of new enterprises	4.740	4 404	0.40/	
	supported		1,740	1,464	84%	
	C6	Private investment matching	172,261,06	24,837,72		
		public support to enterprises			14%	
		(grants, £)	1	1		
	C7	Private investment matching				
		public support to enterprises	20 224 024	215,001	1%	
		(non-grants, £)	28,221,934			
	C8	Employment increase in				
		supported enterprises	12,129	1,438	12%	
	C26	Number of enterprises				
		cooperating with research	11,090	2,358	21%	
		entities				
	C28	Number of enterprises				
		supported to introduce new to	1,633	1,499	92%	
		the market products				
	C29	Number of enterprises				
		supported to introduce new to	3,266	2,389	73%	
		the firm products				
	P2	Public or commercial buildings	8,783	2,034	23%	
		built or renovated (sqm)	3,700	2,007	2070	

Source: MHCLG, Claims Data, RP4003 Outputs and Indicators Evaluation Report, end of January 2020; key: based on performance compared with expenditure claim performance for that PA: green - 10% points or more above, red – 10% points or more below, black – within 10% points

Table B.12 Performance against Operational Programme Output Targets by Investment Priority for PA2, January 2020 Target (2023) Investment Output Claimed to % of target Priority date C1 Number of enterprises 67 2a: Broadband 2,796 2% Infrastructure receiving support C<sub>5</sub> Number of new 604 0% enterprises supported P3 Additional businesses 11,319 3,811 34% with broadband access of at least 30Mbps 2b: ICT in C1 Number of enterprises 11,116 3,384 30% Enterprise receiving support C5 Number of new 7,789 292 4% enterprises supported C29 Number of enterprises 1,779 415 23% supported to introduce new to the firm products P4 5,660 908 16% Additional businesses taking up broadband with speeds of at least 30Mbps

Source: MHCLG, Claims Data, RP4003 Outputs and Indicators Evaluation Report, end of January 2020; key: based on performance compared with expenditure claim performance for that PA: green - 10% points or more above, red – 10% points or more below, black – within 10% points

Table B.13 Per	rforma	nce against Operational Program	nme Output Tar	gets by Inves	tment			
Priority for PA3, January 2020								
Investment		Output	Target (2023)	Claimed to	% of			
Priority				date	target			
3a: Start-up	C1	Number of enterprises receiving	19,509	11,611	60%			
Support		support	19,509	11,011	00 /0			
	C2	Number of enterprises receiving	13,006	1,829	14%			
		grants	13,000	1,023	1 70			
	C3	Number of enterprises receiving	1,434	_	0%			
		financial support other than grants	1,434	-	0 70			
	C4	Number of enterprises receiving	5,069	9,424	186%			
		non-financial support	3,009	3,424	100 /0			
	C5	Number of new enterprises						
	supported 15,		15,607	6,345	41%			

Investment Priority		Output	Target (2023)	Claimed to date	% of target
	C6	Private investment matching public	56,321,803	16,081,753	29%
	C7	support to enterprises (grants, £)			
	C/	Private investment matching public support to enterprises (non-grants,	57,737,243	_	0%
		£)	37,737,243	-	0 76
	C8	Employment increase in supported			
		enterprises	8,102	4,916	61%
	C28	Number of enterprises supported to			
		introduce new to the market	1,561	487	31%
		products			
	P2	Public or commercial buildings built or renovated (sqm)	2,410	-	0%
	P11	Number of potential entrepreneurs			
		assisted to be enterprise ready	62,428	25,123	40%
3c: SME	C1	Number of enterprises receiving	40.770	15 170	240/
products,		support	48,772	15,176	31%
services, and	C2	Number of enterprises receiving	32,515	4,632	14%
development		grants	32,313	4,032	14 70
capacity	C3	Number of enterprises receiving	3,585	_	0%
		financial support other than grants			070
	C4	Number of enterprises receiving	12,672	10,071	79%
		non-financial support	,		
	C5	Number of new enterprises supported	15,488	1,221	8%
	C6	Private investment matching public	400.050.000	10.000.17.1	200/
		support to enterprises (grants, £)	139,956,990	49,686,174	36%
	C7	Private investment matching public			
		support to enterprises (non-grants,	143,474,290	87,635	0%
		£)			
	C8	Employment increase in supported enterprises	20,254	8,413	42%
	C29	Number of enterprises supported to	7.004	0.470	000/
		introduce new to the firm products	7,804	2,178	28%
	P2	Public or commercial buildings built	6.005	20.767	511%
		or renovated (sqm)	6,025	30,767	311%
	P13	Number of enterprises receiving			
		information diagnostic and	4,842	10,096	209%
		brokerage support			
3d: SME	C1	Number of enterprises receiving	29,263	19,424	66%
market growth		support			
	C2	Number of enterprises receiving grants	19,509	6,033	31%
	C3	Number of enterprises receiving			
		financial support other than grants	2,150	10	0%
	C4	Number of enterprises receiving	7.004	40.004	4750/
		non-financial support	7,604	13,284	175%
	C5	Number of new enterprises	9,293	1,745	19%
	_	supported	5,250	.,	10,0
	C6	Private investment matching public	83,974,193	224,743,621	268%
		support to enterprises (grants, £)	,,	, -,	

Investment		Output	Target (2023)	Claimed to	% of
Priority				date	target
	C7	Private investment matching public			
		support to enterprises (non-grants,	86,084,574	31,197,080	36%
		£)			
	C8	Employment increase in supported	12,151	11,020	91%
		enterprises	12,131	11,020	3170
	C29	Number of enterprises supported to	4,682	862	18%
		introduce new to the firm products	4,002		10 /0
	P2	Public or commercial buildings built	2 615	21,462	E0/10/
		or renovated (sqm)	3,615	21,402	594%
	P13	Number of enterprises receiving			
		information diagnostic and	2,905	10,408	358%
		brokerage support			

Source: MHCLG, Claims Data, RP4003 Outputs and Indicators Evaluation Report, end of January 2020; key: based on performance compared with expenditure claim performance for that PA: green - 10% points or more above, red – 10% points or more below, black – within 10% points

Table B.14 Performance against Operational Programme Output Targets by Investment Priority for PA4, January 2020

Investment Priority		Output	Target	Claimed to	% of
			(2023)	date	target
4a: renewable energy production	C1	Number of enterprises receiving support	953	308	32%
	C5	Number of new enterprises supported	191	24	13%
	C30	Additional capacity of renewable energy production (MW)	123	86	70%
	C34	Estimated annual decrease in GHG (Tonnes of CO₂EQ)	75,490	264	0%
4b: SME energy efficiency &	C1	Number of enterprises receiving support	11,408	2,847	25%
renewable take-up	C34	Estimated annual decrease in GHG (Tonnes of CO₂EQ)	61,765	21,507	35%
4c: public and commercial energy	C31	Number of households with improved energy consumption classification 5,416		189	3%
efficiency & renewable take-up	C32	Decrease of annual primary energy consumption of public buildings (KWh/year)	5,227,336	24,010,865	459%
	C34	Estimated annual decrease in GHG (Tonnes of CO <sub>2</sub> EQ)	85,784	10,103	12%
4e: low carbon	C1	Number of enterprises receiving support	9,350	-	0%
strategies	C34	Estimated annual decrease in GHG (Tonnes of CO <sub>2</sub> EQ)	85,784	-	0%
4f: low carbon R&I	C1	Number of enterprises receiving support	2,293	1,253	55%
	C5	Number of new enterprises supported	458	176	38%
	C26	Number of enterprises cooperating with research entities	222	439	198%
	C29	Number of enterprises supported to introduce new to the firm products	367	162	44%

C34	Estimated annual decrease in GHG	34 314	20.220	4440/
	(Tonnes of CO <sub>2</sub> EQ)	34,314	38,238	111%

Source: MHCLG, Claims Data, RP4003 Outputs and Indicators Evaluation Report, end of January 2020; key: based on performance compared with expenditure claim performance for that PA: green - 10% points or more above, red - 10% points or more below, black - within 10% points

Table B.15 Performance against Operational Programme Output Targets by Investment Priority for PA5, January 2020

Investment		Output	Target	Claimed	% of
Priority			(2023)		target
5b: Climate change	C23	Surface area of habitats supported in order to attain a better conservation status (ha)	24	10	42%
adaptation	P6	Business and properties with reduced flood risk	8,263	351	4%

Source: MHCLG, Claims Data, RP4003 Outputs and Indicators Evaluation Report, end of January 2020; key: based on performance compared with expenditure claim performance for that PA: green - 10% points or more above, red – 10% points or more below, black – within 10% points

Table B.16 Performance against Operational Programme Output Targets by Investment Priority for PA6, January 2020

Investment	,	Output	Target	Claim	% of
Priority		Carpar	(2023)	ed	target
6d: green and blue infrastructure	C22	Total surface area of rehabilitated land (ha)	25	23	92%
	C23	Surface area of habitats supported in			
		order to attain a better conservation	1,459	330	23%
		status (ha)			
6f: environmental and resource efficiency R&I	and resource support		1,608	178	11%
·	C5	Number of new enterprises supported	322	14	4%
	C29	Number of enterprises supported to introduce new to the firm products	257	19	7%

Source: MHCLG, Claims Data, RP4003 Outputs and Indicators Evaluation Report, end of January 2020; key: based on performance compared with expenditure claim performance for that PA: green - 10% points or more above, red – 10% points or more below, black – within 10% points

Table B.17 Performance against Operational Programme Output Targets by Investment Priority for PA7, January 2020

Investment		Output	Target	Claimed	% of
Priority			(2023)		target
	C14a	Total length of reconstructed or upgraded	12.5	-	0%
		roads of which: TEN-T (km)			

7a: TEN-T	P7	Length of railway with new or enhanced	43	43	100
network		signalling installation (km)			%
investment					
7c: low	P8	Alternative fuel charging/re-fuelling points	66	2	3%
carbon	P9	Improved multi-modal connection points	2	-	0%
transport investment	P10	Number of multi-modal transport hubs	1	-	0%

Source: MHCLG, Claims Data, RP4003 Outputs and Indicators Evaluation Report, end of January 2020; key: based on performance compared with expenditure claim performance for that PA: green - 10% points or more above, red – 10% points or more below, black – within 10% points

Table B.18 Performance against Operational Programme Output Targets by Investment Priority for PA8, January 2020

Herity for 17to, Gardary 2020						
Investment		Output	Target	Claimed	% of	
Priority			(2023)		target	
9d: SOCIAL	C1	Number of enterprises receiving	1,788	36	2%	
INCLUSION		support				
Strategies	C5	Number of new enterprises	1,252	6	0%	
		supported				
	C8	Employment increase in supported enterprises	1,341	1	0%	
P1		Number of potential entrepreneurs assisted to be enterprise ready	3,755	18	0%	
	P12	Public or commercial building built or renovated in targeted areas (sqm)	1,610	-	0%	

Source: MHCLG, Claims Data, RP4003 Outputs and Indicators Evaluation Report, end of January 2020; key: based on performance compared with expenditure claim performance for that PA: green - 10% points or more above, red – 10% points or more below, black – within 10% points

## **Appendix C - Summative Assessment Review (Separate Document)**

## Appendix D - Beneficiary Survey Evidence (Separate Document)

## **Appendix E - Detailed CIE Analysis**

#### Introduction

- E.1 This appendix complements the analysis presented in the phase 2 evaluation report that uses a counterfactual approach. The evaluation seeks to measure the effects on businesses of either receiving ERDF support or being located near to or in areas where an ERDF place-based investment is made. The first focus is employment impacts. Additionally, the impact on turnover and productivity is measured, using real turnover per employee for the latter.
- E.2 However, any growth seen in businesses might have happened anyway, without support. The goal of the counterfactual evaluation is to identify the additional growth attributable to the ERDF support by using comparable but unsupported businesses or areas. The appendix first considers firm-level impacts, then looks at the approach taken for place-based support.

#### **Approach for Firm-level Support**

- E.3 A means to estimate firm-level impacts is to study non-recipient businesses who are as comparable as possible to the recipient businesses. Propensity score matching (PSM) is used to identify comparable unsupported businesses. This generates a score for each of the supported businesses, based on its characteristics. The same selection model is then applied to score the unsupported businesses and for each of the supported business the methodology identifies the nearest unsupported business in terms of the score. These businesses are as likely as the recipient group to receive support, based on their observable characteristics.
- E.4 Having identified the comparable businesses, the supported businesses and the control are tracked in the Business Structure Database (BSD) linked to other linked datasets. The next sections describe some of the selection models. The robustness and quality are discussed to substantiate the choice of these models. The section then presents some initial results by different types of ERDF investment priorities and outputs. This additional impact analysis focuses on the businesses supported in financial year 2017/18 only at this stage (the 2017 cohort).

#### Selection models

- E.5 Matching is undertaken through estimating a statistical model of the selection process into support. The modelling has to use variables available about businesses before support and these are derived from the BSD linked to other datasets and the beneficiaries. Variables available include industry characteristics (highly knowledge-intensive and high-tech manufacturing), pre-growth employment or turnover trends, geographical proxies, age, employment and turnover size and prior receipt of Innovate UK grants (for relevant forms of support).
- E.6 The selection modelling for this analysis uses a Probit model. The dependent variable takes a value of one for those in receipt of first support and zero for the unsupported businesses who did not receive any support, including from other treatment cohorts or types.
- E.7 Table E.1 indicates the estimates for a selection of the estimated models, looking at modelling without any regional variables; alternative models have been tested and there is a comparability across model results. Selection tends to target smaller businesses, with negative coefficients as size variables increase. Past performance is a strong correlate also, with pre-support employment and turnover growth resulting in an increased chance of selection. The innovation variables especially whether the business has received past Innovate UK support also prove to correlate with selection.

Table E.1 Selection models by cohort of support and for P13 Diagnostics								
Treatment		Whole Cohort		P13: Diagnostics				
Variable Year of 1 <sup>st</sup> support-→	2016	2017	2018	2017				
Local units	0.00 (-0.37)	0.00 (2.25**)	0.00 (0.72)	0.00 (0.61)				
Patentholder	0.41 (10.98***)	0.53 (18.85***)	0.42 (14.48***)	0.34 (7.18***)				
3-9 employees	0.12 (4.77***)	0.09 (4.68***)	0.07 (3.79***)	0.04 (1.31***)				
10-49 employees	-0.24 (-6.91***)	-0.38 (-14.82***)	-0.34 (-13.38***)	-0.27 (-6.36***)				
50-249 employees	-0.89 (-20.05***)	-1.17 (-35.16***)	-1.14 (-35.29***)	-0.91 (-16.25***)				
250+ employees	-1.31 (-15.01***)	-1.75 (-27.04***)	-1.80 (-27.91***)	-1.46 (-12.49***)				
£101,000-500,000	0.01 (0.64***)	0.03 (1.95***)	0.02 (1.34***)	0.05 (1.80***)				
£501,000-1,000,000	0.08 (2.34***)	0.18 (6.61***)	0.17 (6.45***)	0.15 (3.19***)				
£1-5 million	0.06 (1.51***)	0.21 (6.46***)	0.23 (7.28***)	0.16 (2.85***)				
£5-10 million	-0.02 (-0.32***)	0.18 (4.12***)	0.18 (4.21***)	0.11 (1.41***)				
£10-50 million	-0.13 (-1.91***)	0.03 (0.67***)	0.01 (0.15***)	0.00 (0.05***)				
Over £50 million	-0.59 (-5.05***)	-0.45 (-5.30***)	-0.40 (-4.95***)	-0.36 (-2.42***)				
High KI Services	0.17 (8.07***)	0.26 (17.43***)	0.24 (16.13***)	0.12 (4.47***)				
High KI Manufacturing	0.24 (3.95***)	0.46 (10.64***)	0.31 (6.85***)	0.30 (4.25***)				
Inn UK proj b/f 2016	0.48 (10.11***)	0.49 (13.47***)	0.41 (11.00***)	0.22 (3.49***)				
Scale-Up	-0.11 (-1.79***)	0.05 (1.16***)	0.05 (1.11***)	0.00 (-0.04***)				
Log employment (t-1)	0.11 (9.43***)	0.18 (20.82***)	0.17 (20.45***)	0.14 (9.74***)				
Log real turnover (t-1)	0.03 (3.40***)	0.00 (0.50***)	0.01 (2.01***)	0.02 (1.15***)				
Emp change, yr. before	0.23 (14.07***)	0.31 (25.97***)	0.30 (25.51***)	0.21 (10.38***)				
T/o change, yr. before	0.01 (0.87***)	-0.01 (-1.09***)	0.01 (0.80***)	0.01 (0.53***)				

Constant	-2.28 (-58.12***)	-1.88 (-66.32***)	-1.93 (-68.24***)	-2.56 (-49.98***)
Adjusted R-square	0.04	0.06	0.06	0.04
Observations	232,770	241,644	252,482	241,644

Note: Significance levels are 1% (\*\*\*), 5% (\*\*) and 10% (\*); T-statistics in parenthesis using robust standard errors; knowledge intensity derived using the sectors identified in recent Eurostat work, with high manufacturing KI being SIC 21, 26, 30.3; high services KI SIC 59-63, 72; The wider definitions, called medium KI, for manufacturing is SIC 20-21, 25.4, 26-29, 30 [excl 30.1] and for services SIC 58-63, 71-72, 74.9. This is an SQW update to the Eurostat definitions including some UK specialisations (SQW, 2013, "The Oxfordshire Innovation Engine").

- E.8 The modelling produces a set of robustness tests. Propensity score plots indicate whether there is common support after the selection modelling, in that for all supported businesses there was a match found. This was the case in all but the 2017 cohort, and this is discussed below. Other outputs looked at the sensitivity of the difference-in-differences to alternative matching, establishing when these results would change as matching accuracy is relaxed (so-called bounds tests).
- E.9 Figure E.2 below plots the propensity scores for the three cohorts.

Figure E.2 Timing of ERDF Funding for Area-Based Interventions

2016 Cohort

2017 Cohort

2018 Cohort

Propensity Score

Propensity Score

Propensity Score

Treated On support

Unitreated

Treated

Source: Analysis of beneficiaries linked to BSD and other datasets

- E.10 The plots indicate a good match for 2016 and 2018. On the horizontal axis is the propensity score and the frequency of observations by propensity scores is plotted for the supported businesses in red and the matched control in blue. Matching has found a comparable business roughly in proportion to the distribution of scores. The plots indicate that the 2016 cohort is smaller than the other two in terms of the number of observations, with the "buckets" for the frequency distribution containing a higher proportion of the sample.
- E.11 The 2017 cohort has a small number of observations where matching was not possible. These observations are then not used in the analysis of difference-indifference, as they are considered outliers or exceptions.
- E.12 In each model, the Rosenbaum bounds test was used to indicate how much the modelling would need to be incorrect before the tested impact ceases to be significantly different from the starting point for modelling. This is done by checking what happens if the propensity score of the matched group is not as close to the beneficiaries as possible. These tests show results remain stable even to a high level of degradation of the matching.

#### **Summarising supported businesses by ERDF Outputs**

- E.13 To further explore the robustness of the analysis, the aggregate analysis presented in the report was explored at a lower level of analysis, to consider whether this changes or adds insight for the analysis undertaken for the 2016, 2017 and 2018 cohorts.
- E.14 0 focuses on the Claims data which details ERDF support by output type, and so under which of the ERDF outputs each incident of support is recorded. There were 61,726 incidences of support that recorded a valid output code.
- E.15 Most incidences of support had a Companies House number and could be linked to the BSD, around 49,000 in total. Businesses may benefit from multiple incidences of support. Where a business received support more than once of the same output, the first is the focus, with subsequent additional support to the business not considered new for impact analysis. ERDF projects may also report a single incidence of support under a specific output (e.g., C26 is a business being supported in working with a research institution) and then under the catch all C1 output, "Business support", i.e., the database of incidences is likely to have duplicates across output codes.
- E.16 The third column attempts to adjust for businesses being recorded against more than one ERDF output type. There are 38,860 businesses in total and where a business has received for example 2 different support types, then the rest of the table would record this as a half, for three different support types, the business would be a third etc. These final adjustments may appear unnecessary, but looking at the data, it appears most likely that the recording of support by output type is double counting the same support more often than recording two incidences of support, due to the catch-all nature of output code C1.

Table E.3 Support incidence by ERDF output type

					Year of	first supp	ort		
Des	cription	AII	Linked	Adjusted	2015	2016	2017	2018	2019
C1	Business support	21,33 0	17,353	13,658	84	1,924	5,108	5,266	1,276
C2	Grant	2,944	2,609	2,268	13	289	946	806	214
C26	Research body	773	611	<10	<10	76	213	170	47
C28	Innovation	360	271	<10	<10	29	77	87	16
C29	Innovation	1,184	962	<10	<10	111	321	342	38
C4	Non-financial business support New business	11,83 4	9,072	7,220	65	1,235	2,763	2,517	640
C5	support	2,048	780	<10	<10	21	93	124	14
C6	Private co-investment	3,066	2,727	<10	<10	304	930	908	218
C8	Employment Other C coded	2,680	2,151	<10	<10	250	742	642	132
	outputs	362	343	<10	<10	27	78	169	48
P11	Enterprise culture	1,222 10,75	732	471	12	97	165	135	62
P13	Diagnostics	5	8,478	6,994	89	1,261	3,016	2,101	527
Р3	Broadband	2,577	2,312	<10	0	919	649	514	<10
P4	Broadband > 30Mbps Other P coded	532	478	436	0	225	74	137	<10
	outputs	59	56	<10	0	<10	<10*	52	<10
	All	61726	48935	38860	280	5949	13843	14365	4423

E.17 Linking to the BSD allows some summary statistics to be explored. Table E.4 provides a summary of the applicants included in the analysis in 2016/17 and 2017/18. Sample sizes reduce a little further, as all the businesses that receive support in a year will not have all the data needed to undertake impact analysis. For this, analysis will need the business to be in the register for two years before support, to provide pretreatment variables for propensity score matching.

	Treated	Grant	Non- financial support	Private co- investmen	Researc h body	Innovation	Broadban d	Diagnostics
	All	C2	C4	C6	C26	C29	P3	P13
Employment	50.4	27.1	19.2	20.1	66.3	17.3	18.4	34.7
Employment (logs)	2.01	2.25	1.95	2.25	2.39	2.05	1.42	2.07
Real turnover (logs)	6.23	6.59	6.07	6.57	6.64	6.21	5.77	6.32
Real sales per emp (£'000)	113.5	114.4	103.0	120.0	122.0	102.1	125.7	114.4
Scale-up	0.9%	1.1%	1.0%	1.1%	0.6%	1.9%	0.2%	0.8%
Industry								
Highly knowledge-intensive services	11%	8%	15%	10%	11%	11%	12%	9%
High-medium KI services	1.7%	2.6%	2.1%	2.3%	0.6%	4.2%	0.5%	1.5%
Business demographics								
Age								
<2 years	1%	1%	2%	1%	1%	1%	1%	1%
2-5 years	21%	17%	23%	18%	21%	20%	21%	21%
6-10 years	22%	20%	24%	22%	27%	23%	24%	22%
11+ years	55%	61%	51%	60%	51%	57%	54%	56%
Live local units	2.2	1.3	1.2	1.2	2.6	1.1	1.1	1.9
UK owned	80%	78%	81%	79%	72%	80%	86%	81%
London-SE	11%	5%	16%	5%	8%	12%	2%	7%
Observations	11,081	798	2,126	800	166	260	588	2,420

Note: Supported businesses started receiving support in 2017/18. All variables are measured in 2016/17; smaller support types have been removed so columns C2-P13 will not sum to All.

- E.18 Looking at employment, it is apparent that there are some outliers. The mean employment is quite high and for analysis generally the log employment and turnover are used to reduce the outlier effects. Whereas the total number of jobs per business is 50, the geometric mean would be nearer 7 employees. This is further corroborated by the number of local units in the businesses, where a higher number indicates that the data includes some businesses with multiple locations, for example in the support for businesses working with research institutions (C26).
- E.19 The BSD can be analysed at local unit level for employment (but not turnover). However, the majority of businesses are single plant and so the enterprise level data, which is more comprehensive, is identical to local unit data for most businesses. So, analysis at enterprise level is maintained.
- E.20 The businesses are generally in knowledge intensive sectors and ownership was UK. One notable feature about the businesses is that the sample used in the analysis tends to miss the recent start-up businesses, with the share of businesses in the less than 2-year-old category being modest. This is primarily due to the need for pre-treatment data to undertake matching and some further analysis may mitigate against this or test the sensitivity of results to this data requirement.

#### Re-analysing 2017 impacts at a detailed level

- E.21 The report chapter estimates the additional employment that can be attributed to the ERDF support. That analysis estimated an increase of 71,400 years of employment over the three cohorts of support.
- E.22 0 presents an analysis for the 2017 cohort that seeks to understand the employment change at a more granular level. The focus is the six largest output types: the number of businesses that benefit from one of these six outputs constitutes 90% of the 2017 cohort of supported businesses, once the catch-all C1 Output has been recoded to other output coded, so that the remaining 10% availing one of the other seven outputs other than C1.

Table E.5 Impact	able E.5 Impact measures by ERDF Output type, 2017 Cohort								
-				Growt	Diff-in-	Employment			
Output		Measure		h	Diff	change			
							2016-17	2016-18	
		Emp	change,	2015-					
C2: Grant		2018			25.0%	7.8%***	1544	2686	
C4: Non-f	nancial	Emp	change,	2015-					
support		2018			25.1%	7.3%***	3700	6173	
C6: Privat	e co-	Emp	change,	2015-					
investmer	•	2018	_		27.4%	12.6%***	1065	2362	
C8: Emplo	pyment	Emp	change,	2015-					
support		2018		0045	44.0%	21.1%***	3453	6258	
D40 B'		Emp	change,	2015-	40.00/	0.00(***	0040	0040	
P13: Diag	nostics	2018		0045	18.9%	6.6%***	3618	-2313	
D2: D***	hand acces	Emp	change,	2015-	7.00/	4.00/	4440	000	
P3: Broad	band access	2018			7.3%	-4.9%	-1112	-669	
Total							26,	765	

Note: Significance levels are 1% (\*\*\*), 5% (\*\*) and 10% (\*).

- E.23 The supported businesses increase employment, adding 26,765 years of employment. This is consistent with the results presented earlier, which is not surprising as the same businesses will be being tracked in this output-level analysis as in the analysis across the whole cohort. However, the evidence about what proportion of this employment growth is seen in the supported businesses but not in comparable businesses is also consistent with the analysis in the chapter. Difference-in-difference estimates are similar to the cohort level estimates. They confirm that about a third of the employment is additional.
- E.24 The detailed analysis offers some additional findings: broadband access to businesses does not in the 2017 cohort show a significant additional effect. Rather, similar businesses have increased employment faster. Secondly, the businesses for which a C8 job creation output is claimed are, understandably, experiencing larger employment growth than those receiving other support types.

#### **Approach for Area-based Investments**

E.25 Area-based initiatives include a wide range of interventions at varying scale and purpose. Evaluating the economic effects of area-based initiatives is challenging, as it is difficult to attribute the policy to the changes in economic outcomes. Often the locations will already be experiencing weaker economic growth, and evaluations then have to address policy endogeneity. Naïve comparisons between supported and unsupported areas will lead to biased estimates of the economic impact of such schemes. This is even after controlling for underlying factors, as some differences between supported and unsupported areas may persist and they may be unobservable in the data.

#### **Reviewing Recent Studies**

- E.26 Recent literature tends to compare neighbouring areas to estimate the additional effects of an area focused policy. The reason is that the closer an area is to the supported area, the more likely it is to be similar to the supported area except for not benefiting from an area-based intervention. Busso and Kline (2008), and Busso, Gregory and Kline (2013) have used unsupported areas for identification of economic impact, by using rejected and future Enterprise Zones as a comparison group. Neumark and Kolko (2010), Ham et al (2011) and Hanson and Rohlin (2013) developed complementary strategies that used nearby treated areas as controls.
- E.27 Gibbons (2015) and Einiö and Overman (2016) used more finely spatially detailed data to further develop identification strategies based on comparisons to nearby untreated areas. Gibbons et al. (2017) estimate the impact of interventions supported by the Single Regeneration Budget using a "concentric rings" approach, as well as using the timing of SRB projects, to identify the impact on employment and local unemployment rates.
- E.28 An issue with the concentric rings approach is that by constructing control areas based on rings around the supported area, the rings may include unproductive land therefore may not be able to provide a satisfactory analysis. To mitigate for this,

- this study uses Lower Super Output areas, matching the LSOAs to the project areas, and using unsupported LSOAs as controls. The LSOAs were designed to have economically or socially meaningful boundaries with other LSOAs to clearly delineate different locales. Whereas, using concentric rings for evaluative purposes lacks carefully considered boundaries.
- E.29 The What Works Centre (2016) reviewed over 2000 spatial policy evaluations, most of which analysed the European Union Structural Funds such as the ERDF. The review highlighted that of the studies analysing employment effects, half found positive impacts due to the areas-based initiatives with the larger effects occurring in the larger or more developed regions. The evaluations showed a mostly positive effect on the number of businesses. The review highlights that within area-based analyses, the establishment of causality requires the use of counterfactuals. Control groups, however, are not always easy to identify and bias often results due to the pre-existing economic circumstances of the chosen control group.
- E.30 The What Works Centre (2016) recommends the use of Ordinary Least Squares (OLS) regression and matching to address the issue of selection bias. Gibbons et al. (2015) agree with this suggestion, stating that the use of 'quasi-experimental' sources of randomisation can address selection bias and the use of OLS, and matching techniques can help to solve this problem. They conclude that a good quality impact evaluation uses identification strategies to construct a control group and then can control for remaining differences using observable characteristics.

#### **Detailing the ERDF Support**

E.31 Using time and spatial differencing depends critically on locating the supported projects accurately and understanding the timing of investments changing the local areas. 0 indicates how the period of analysis for the area-based ERDF investments was determined. No funding was made available in 2014-15, suggesting that the 2014 employment and turnover estimates would provide a pre-investment baseline. This year was also the first that used the LSOAs of the 2011 Census, which greatly simplified the creation of a panel of LSOA-level employment and turnover estimates for the years after 2014.

Figure E.6 Timing of ERDF Funding for Area-Based Interventions



Source: ERDF Monitoring Data, Dec 2019 extract

- E.32 As noted, an issue is that some of the area-based interventions have a geographical spread that is unknown. Each project is located by a postcode in the monitoring information, which is a specific place. As a result, the use of spatial differencing using strict boundaries. (i.e., measuring the difference between an area and its neighbour) cannot be used to estimate impact because the stable unit treatment value assumption<sup>24</sup> cannot be met. In other words, identification relies on the assumption that spill-overs of these policies are limited geographically within certain boundaries.
- E.33 A way to overcome these problems, is to understand that the treatment effect varies with intensity at different distances from an ERDF sponsored project. The standard difference-in-differences approach is altered to allow the control group to change in size by varying geographical distances of comparison firms (the control group will increase in size when more geographically distant firms are included in the analysis). This approach assumes all firms within a given distance of an intervention are treated with areas close to an intervention "treated" more intensively than areas further afield. The intensity of the effect is expected to decrease monotonically with distance.

8.6 
$$\Delta y_i = \beta_0 + \beta_1 T_{ir} + u_i$$
;  $i = [1, ..., n(d)]$ 

E.34 Where  $\Delta y_i$  is the within-firm logarithmic change in employment, turnover and labour productivity growth between 2014 and 2018.  $T_{ir}$  is a binary indicator equal to one if a firm i is located in an LSOA benefitting from an ERDF supported intervention and 0 otherwise. The sample size is n(d) which is an increasing monotonic function of the geographical distance (d) of the control group. For example, when only control firms are selected (dropping duplicates and the treatment group) within 1km of the "treated" LSOA, the sample size is 100 and increases as more firms are chosen as "controls".

<sup>24</sup> The stable unit treatment value assumption requires that the observation on one unit should be unaffected by the particular assignment of treatments to the other units (Cox, 1958).

#### Estimating the relocation of businesses

- E.35 One of the advantages of the BSD is that it tracks businesses as they relocate. This allows the flow of businesses and employment into an area to be analysed both in terms of new employment and new businesses, and in terms of existing businesses relocating. For most businesses, which have a single establishment, working at both establishment and whole business level provides an adequate analysis of geography. Further, the BSD local unit data lists the individual establishments, allowing the multi-establishment businesses to be accurately located. Code has been written to identify such relocators using the local unit level of data in the BSD.
- E.36 0 presents the cumulative relocation to and from supported areas. The focus here is the number of establishments, indicating businesses that started outside the supported areas but moved to them (in red) and the flow to the neighbouring proximate areas used as the control (blue line). However, the analysis can also calculate the employment associated with relocation. In particular, it is used to estimate the displacement associated with a place-based support. These are the jobs that have moved to the area from an unsupported area, jobs which otherwise would have continued in their original location and so not considered to be additional.

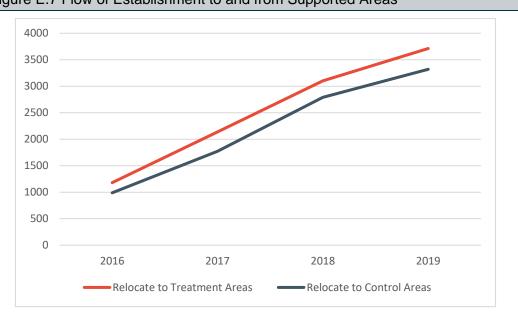


Figure E.7 Flow of Establishment to and from Supported Areas

Source: Analysis of BSD by whether establishment location changes.

#### Characterising supported and nearby unsupported areas

E.37 Control areas are selected primarily in terms of proximity. However, the heterogeneity of even neighbouring areas is a concern as it is easy to consider the use of distance, while practical, may prove to be too simple. 0 presents some summary statistics about the supported LSOAs and the areas within 10km of these.

	All Areas (Supported and Unsupported within 10 km)	Supported Areas	Unsupported Areas within 1km	Unsupported Areas within 5km	Unsupported Areas within 10km
Number of LSOAs	3821	100	118	1750	3722
As a % of Economically Ac	tive Persons				
Employed	86.39	76.79	85.03	87.14	88.93
Part Time	20.69	16.98	19.73	20.93	20.80
Full Time	55.38	48.18	54.09	54.66	55.59
Self Employed	12.52	11.63	11.22	11.55	12.55
Unemployed	6.22	6.82	6.70	6.90	6.21
Full Time Students	5.19	16.39	8.27	5.96	4.86
Inactive	43.81	73.83	48.74	45.72	42.92
Retired	20.05	16.67	18.06	18.82	20.15
Young Unemployed Aged	4 ===	4.0=	4.00	4.00	4 = 2
16-24	1.79	1.87	1.89	1.99	1.79
Old Unemployed 50-70	1.15	1.13	1.14	1.20	1.15
Long Term Unemployed	2.45	2.66	2.57	2.71	2.44
Male Employment	47.23	42.25	46.07	46.86	47.38
Males Unemployed Males Long Term	3.76	4.34	4.14	4.20	3.75
Unemployed	1.41	1.68	1.54	1.57	1.40
Female Employment	41.36	34.54	38.96	40.28	41.56
Females Unemployed Female Long Term	2.46	2.48	2.56	2.70	2.46
Unemployed	1.04	0.98	1.03	1.13	1.04
Higher Managerial	13.47	12.98	12.71	12.39	13.87
Lower Managerial Intermediate	28.76	24.40	26.26	26.74	28.89
Occupations Small Employers and	18.32	14.36	16.40	17.62	18.44
Own Account Workers Lower Supervisory	12.58	11.57	11.36	11.83	12.61
Occupations Semi-Routine	10.30	9.03	10.00	10.51	10.34
Occupations Routine Occupations	21.21 17.31	19.16 16.03	21.71 18.07	22.33 18.94	21.27 17.35
As % of Total Population					
White Total	87.38	79.74	82.08	82.02	87.63
White British	83.23	73.26	75.70	77.23	83.55
Mixed	1.81	2.51	2.06	2.11	1.79
Asian/Asian British	8.50	12.68	12.44	12.81	8.37
Black/ Black British	1.61	3.33	2.22	2.09	1.56
Other Ethnic Group	0.69	1.74	1.20	0.97	0.66

### **Appendix F - Recommendations**

#### **Continued Relevance and Consistency**

- F.1 Action 1. The evaluation has not identified at this stage a need for any further changes to programme strategy or to reallocate resources within the programme (over and above the most recent changes made as a result of the impacts of Covid-19). However, MHCLG should carefully monitor, along with other government departments, the emerging local impacts of Covid-19 (and the outcome of the trade negotiations) and the potential need for further action to help address the consequences.
- F.2 Action 2. The Managing Authority should also carefully monitor the impact of the Covid-19 and the recession on the take-up of start-up, SME competitiveness and research and innovation support as these are major expenditure areas and also vulnerable to lower levels of demand as businesses respond to the challenges they face. Given the more flexible approach to project monitoring which MHCLG has taken due to the impact of Covid-19 on project delivery, it may need to rely on more informal approaches (e.g., through contract managers' contact with project managers). It should also keep a close watch on project delivery organisations which may be facing particular challenges with project delivery due to the effects of Covid-19, such as the loss of staff to Covid-19 related duties.
- F.3 Action 3. The ERDF programme's low carbon economy priority has been one of the more challenging parts of the programme due to scale of the available resources, limitations of local capacity and a fairly dynamic national policy picture. Whilst actions have been taken to address these issues, there remain challenges around the respective roles and integration between national programmes and local projects. There is limited scope to address these issues now within the remainder of the ERDF programme's investment period, however this is an issue which needs to be carefully considered in designing the zero-carbon economy transition strand of successor initiatives such as the Shared Prosperity Fund (such as avoiding duplication of eligible investment approaches and activities without good reason, focusing local projects on adding value and filling gaps in national initiatives, and helping to bring greater local coherence through combining national and local approaches).

#### **Financial and Output Delivery Progress**

F.4 **Action 4**. MHCLG need to continue to carefully monitor the effect of Covid-19 and related issues on the programme contracting. This includes the potential loss of projects in the pipeline, especially in PA1 and 4 due to the potential for delivery partners to be vulnerable to the consequences of Covid-19 on their organisations, as well as the challenges faced by some projects to delivering against their expenditure and output targets (although the flexibilities provide are helpful in this regard).

F.5 **Action 5**. The focus of MHCLG's monitoring activity is quite rightly on the performance framework targets, however it risks overlooking the overall aggregate position for the programme as a whole. In addition, a number of the issues related to specific investment priority output targets and progress towards them needs further investigation by MHCLG and the evaluation team. This may help to clarify a wider set of considerations about how ERDF investment is being used on the ground.

#### **Evaluation Data and Analysis**

- F.6 **Action 6**. The review of summative assessments has been limited in this phase due to having fewer assessments to review than expected and issues with the quality of the assessments which have been available. As outlined in section 2 below, steps have been put in place by MHCLG and the evaluation team to help address these issues, however this needs to be monitored closely over the next nine months.
- F.7 **Action 7**. The response achieved for the SME Competitiveness survey in particular is heavily skewed to just a third of the LEP areas. This largely reflects the spatial pattern of available monitoring data at the time of this particular survey (rather than the underlying pattern of delivery at a LEP level, although this is a minor contributory factor). This issue has now been addressed by MHCLG and whilst it is not expected be an issue for the phase 3 surveys, this needs to be monitored.
- F.8 **Action 8**. Neither the surveys nor the CIE analysis included the SME beneficiaries from the major SME investment funds which the programme is funding. These are expected to be a major source of business and economic impact and therefore it is important to capture this here. MHCLG is taking steps to ensure the inclusion of these beneficiaries in the phase 3 analysis and this needs to be finalised as soon as possible.
- F.9 **Action 9**. Given the limited scope to include beneficiaries supported in 2020 within the counterfactual analysis by the timing of phase 3 (due their post-support performance data not being picked up in the ONS's business admin data), it may be possible to reduce the amount of additional beneficiary monitoring data which is gathered from projects and hence reduce the information burden placed on them. This needs to be investigated further by the evaluation team.

#### **Planning for Phase 3**

F.10 Action 10. Whilst the assessment of the continued relevance/consistency and delivery and management of the programme (i.e., process evaluation themes) had not been earmarked for detailed analysis within Phase 3, the challenges arising from the Covid-19 pandemic and the subsequent recession means that more weight may need to be placed on these aspects. These issues need to be investigated further in Phase 3, providing opportunities to draw valuable lessons for the Shared Prosperity Fund and other new initiatives.

- F.11 **Action 11**. Currently the evidence which is being collected through the monitoring and evaluation approaches are not likely to provide good quality evidence for a number of the underpinning evaluation questions or type of aspect of the programme strategy or approach to delivery. The main areas this applies to are the horizontal principles, strategic urban development (SUDs) and delegated authority. There is a need to consider the manner in which the phase 3 evaluation can adequately incorporate these themes.
- F.12 **Action 12.** There are a number of steps which need to be taken to improve the contribution of the CIE analysis to the evaluation in Phase 3: (i) analysis of the variations in business impacts between the main investment priorities, output categories and LEP areas; (ii) inclusion in the analysis of the beneficiaries SMEs which receive repayable finance from the major financial instruments being supported through the ERDF programme; (iii) examination of a wider set of impacts which can be analysed with through a longer post-support dataset (e.g. business start-up and survival).