

OPERATIONAL PROGRAMME UNDER THE 'INVESTMENT FOR GROWTH AND JOBS' GOAL

CCI	2014UK16RFOP003
Title	United Kingdom - ERDF Northern Ireland
Version	2.1
First year	2014
Last year	2020
Eligible from	01-Jan-2014
Eligible until	31-Dec-2023
Making use of Art. 96(8) CPR	
Major amendment (requiring EC approval - cf. Art. 96 CPR)	✓
Approved by monitoring committee	✓
Justification for amendment	The major project to be undertaken in PA 3 has not proceeded. This modification removes the major project and introduces replacement activity. This modification also includes the MFF adjustment. PMC approval given 19 July 2017
EC decision number	
EC decision date	
MS amending decision number	
MS amending decision date	
MS amending decision entry into force date	
NUTS regions covered by the operational programme	UKN - NORTHERN IRELAND

1. STRATEGY FOR THE OPERATIONAL PROGRAMME'S CONTRIBUTION TO THE UNION STRATEGY FOR SMART, SUSTAINABLE AND INCLUSIVE GROWTH AND THE ACHIEVEMENT OF ECONOMIC, SOCIAL AND TERRITORIAL COHESION

1.1 Strategy for the operational programme's contribution to the Union strategy for smart, sustainable and inclusive growth and to the achievement of economic, social and territorial cohesion

1.1.1 Description of the programme's strategy for contributing to the delivery of the Union strategy for smart, sustainable and inclusive growth and for achieving economic, social and territorial cohesion.

The 2014-20 Northern Ireland ERDF Investment for Growth and Jobs Programme (the Programme) aims to boost economic growth and promote low carbon strategies via investment in social housing energy efficiency and low carbon public transport infrastructure.

The Programme sets ambitious targets based on the need to develop the economy through knowledge exploitation, innovation commercialisation, export growth, job creation and carbon energy saving initiatives. By doing so, Northern Ireland (NI) will play its part in supporting the achievement of the Europe 2020 targets of smart, sustainable and inclusive growth.

The Programme embraces the principle of thematic concentration by focusing solely on Thematic Objectives 1, 3 and 4 as set out in Regulation (EU) No 1303/2013. The NI European Social Fund (ESF) Programme will focus on activities under Thematic Objectives 8, 9 and 10.

The ERDF thematic concentration is detailed in Table A in the Documents section.[1]

This Programme is built on a number of Priority Axes (PAs). Priority Axis 1 & 2 will each support one Thematic Objective and one Investment Priority, whilst Priority Axis 3 will support one Thematic Objective and two Investment Priorities. (A Technical Assistance PA will support programme implementation). In doing so, the Programme will seek to address identified regional development needs relating to:

- Research, development and innovation
- SME competitiveness
- Low carbon energy use

Specific objectives have been established for each of the needs identified and clearly defined, measurable targets have been set. Further details are included in Section 2, but are summarised in Tables B and C in the Documents section which set out Smart Growth Objectives and Targets, and Sustainable Growth Objectives and Targets, respectively.

Activity supported under the ESF Investment for Growth and Jobs Programme will be designed specifically to address Inclusive Growth in NI. Table D in the Documents section outlines the objectives and targets have been set for the ESF Programme.[3]

SMART GROWTH

The Europe 2020 strategy seeks to promote smart growth by developing an economy based on knowledge and innovation. These ambitions are shared in NI.

The NI Executive is committed to improving the economic competitiveness of the NI economy, and two key strategies set the strategic context for Northern Ireland's aspirations in this regard. They are:

1. The Northern Ireland Economic Strategy
2. innovateNI, the Innovation Strategy for Northern Ireland, 2014-2025 [6]

1. The Northern Ireland Economic Strategy (NIES)

The NIES[4] sets out a vision for 2030 to have an economy 'characterised by a sustainable and growing private sector, where a greater number of firms compete in global markets and there is growing employment and prosperity for all'.

The overarching goal of the Strategy is to improve the economic competitiveness of NI. It recognises that the economy has been overly dependent on the public sector. This has constrained economic growth and contributed to a very large fiscal deficit[5]. There is therefore a need to rebalance the NI economy by growing the private sector.

The Economic Strategy identifies five strategic themes required to achieve this change. Three of the five themes reflect an ambition to promote smart growth. They are to:

- stimulate innovation, R&D and creativity
- encourage business growth

- compete in the global economy

The key objectives of the NIES include:

- supporting £300m investment by businesses in R&D, with at least 20% coming from SMEs, and
- supporting 500 businesses to undertake R&D for the first time and secure 120 Collaborative Projects in R&D

2. InnovateNI

InnovateNI[6I], the Innovation Strategy for Northern Ireland 2014-2025, seeks to expand upon and refine the priority within the Economic Strategy to ‘stimulate Innovation, R&D and Creativity’.

The strategy, which has been developed following extensive consultation with key stakeholders, sets out the priority actions necessary to support businesses in all areas of the NI economy to become more innovative. It states that, ‘Innovation is the successful generation and exploitation of new ideas. It is about transforming creative thinking into new products, new and improved processes to support new ways of doing business’.

InnovateNI sets out a vision for NI, by 2025, to be recognised as an innovation hub and to be one of the UK’s leading high growth, knowledge-based regions which embraces creativity and innovation at all levels of society’.

One of the anticipated tangible outcomes of the innovateNI strategy is to achieve, by 2025, expenditure of over £1.2 billion per annum on Research and Development.

The NI Executive has placed innovation at the heart of its efforts to transform the NI economy into one that is truly knowledge based and export focused.

The NI Executive acknowledges that the public sector can play a powerful role in encouraging innovation.

The focus of the innovateNI strategy is primarily on companies and how they can be better supported to engage in innovation in order to achieve NI’s wider economic

objectives. It identifies NI's strategic innovation priorities, along with key actions to deliver these, through to 2025.

Amongst other aims the strategy seeks to achieve:

- More firms engaged in innovation;
- More companies, particularly local SMEs investing in R&D; and
- Enhanced creativity and design in everything we do

To achieve this, actions will:

- Increase the focus on those companies who are not innovation active;
- Encourage more businesses to innovate and carry out R&D
- Prioritise support in areas which will have the greatest potential economic impact for NI
- Use foresight activity to inform government of emerging technologies and future markets

Key measures to monitor progress will include 'Number of R&D companies' and 'BERD by indigenous SMEs'. The specific objectives of the ERDF Programme align closely to the actions and aspirations of the InnovateNI strategy.

Research has consistently shown a link between the use of design and improved business performance, and many leading European innovation economies have placed design at the centre of their innovation strategies. Northern Ireland also recognises that design is a key enabler and driver of innovation.

DEVELOPMENT NEED 1: EVIDENCE OF NORTHERN IRELAND'S RESEARCH, DEVELOPMENT & INNOVATION NEED

The role of Research, Development & Innovation

Research, Development and Innovation (RD&I) plays an important role in economic development. A large body of evidence shows that innovative economies are more productive and faster growing[7]. They deliver higher returns on investment and increased living standards. Investing in the exploitation of knowledge and information contributes to the overall wealth of a country.

RD&I also plays an important role in the innovation process resulting in the development of new technology and/or organisational capacity to bring new products and services to the market place. Investing in RD&I enables businesses to better position themselves to achieve and maintain a competitive advantage in an increasingly global market place. RD&I expenditure supports activities that underlie future economic development. Innovative economies are better at responding to changing circumstances.

Evidence shows that innovative companies (defined as those that have introduced a new product or process) grow nearly twice as quickly in terms of both employment and turnover as non-innovators[8]. The same research shows that UK businesses with the highest growth rates (6% of total businesses) generated half of the new jobs created by existing businesses. In addition following the financial crisis, economic recovery has been substantially stronger in countries which had previously invested the most in RD&I[9].

Northern Ireland RD&I performance

NI performance as regards investment in Research and Development activities has improved considerably in recent years, with increases aligning closely with ERDF investments over the same period.

In NI, in 2012, the total level of expenditure on R&D was £624.1m. Business Expenditure on Research and Development (BERD) was £461.3m, Higher Education (HERD) expenditure was £147.3m and Government Expenditure (GOVERD) was £15.5m[10]. Based on Office for National Statistics (ONS) data for in-house BERD, total NI Expenditure on R&D (GERD) was calculated as 2.1% of GVA in 2012.

The EU2020 target seeks to see 3% of the EU's GDP being invested in R&D by 2020. Whilst for the purposes of the Programme, BERD will be measured in terms of % of GVA[11] rather than GDP, the Programme supports to encourage expenditure on R&D will ultimately contribute to increased R&D expenditure as a % of GDP.

There has been a considerable rise in NI R&D expenditure in recent years, albeit from a relatively low base. Growth from £344m in 2008 to £624.1m in 2012 represents an increase of 81% and indicates that a step change is possible. R&D expenditure growth has been largely due to businesses, where spending has increased by 151% during the same period. This is illustrated in Figure 1 in the Documents section.

In terms of RD&I intensity, BERD has increased from 0.7% of Gross Value Added (GVA) in 2008 to 1.6% of GVA in 2012. R&D growth has been largely due to businesses, where spending increased by 151% during 2008-12.

Whilst mostly due to increases in R&D spend, the increase in BERD as a percentage of GVA has also stemmed from GVA contractions in recent years. Total NI R&D expenditure has increased from 1.3% of GVA in 2008 to 2.1% of GVA in 2012.

Whilst BERD has increased from 0.7% to 1.6% during this time, both HERD and GOVERD have remained relatively constant at around 0.5% and 0.1% respectively.

Improvements in BERD performance placed NI above the UK average of 1.3% of GVA in 2012[12], as presented in Table E in the Documents section.

However, whilst NI BERD has improved significantly, only a relatively small number of firms actually undertake RD&I activity. The ten biggest spending companies accounted for 63% of the total RD&I spend in 2012[13].

In an international context, NI (1.4%) continues to lag behind top performers including Israel (3.5%)[14], Finland (2.7%)[15], Germany (1.9%)[16] and the United States (2%)[17]. International comparisons also indicate that the overall spend on RD&I in the UK as a whole, relative to GDP, seems to be weakening over time[18]. The BERD component of RD&I expenditure in the UK is low by international standards. It is also concentrated in the hands of a few very large firms and the small number of industrial sectors in which they are based[19].

In addition, NI firms have among the lowest levels of innovation activity amongst the UK regions, with a relatively small business base engaging in RD&I, and so it is of critical importance that firms across all sectors embrace innovation in all its forms.

Barriers to innovation activity include lack of access to capital or incentives to undertake such activity.

This R&D&I position is recognised by the European Commission. The ‘Position of the Commission Services on the Development of the Partnership Agreement and programme in the United Kingdom for the period 2014-2020’ paper (the Position paper) issued by the European Commission to the UK in 2012 set out key country-specific challenges and presented the Commission’s views on the main funding priorities for the UK for growth-enhancing public expenditure. It concluded that the UK has suffered from stagnant

levels of investment in RD&I in recent years. According to the Commission, this underinvestment threatens to undermine the competitiveness of the UK[20].

The Council of the European Union, in its Country Specific Recommendations (CSR) paper to the UK of 9th July 2013[21], in the context of the European semester, refers to the findings of Commission's in-depth analysis of the UK, and highlights that the UK has a low level of BERD, which fell from 1.17% of GDP in 2001 to 1.09% in 2011. It states that whilst BERD has picked up slightly, with an annual increase of 4.9% in 2012, the level remains low. Previous Country Specific Recommendation papers can also be viewed; 2013[22], 2012[23] and 2011[24].

The InnovateNI strategy recognises that the challenge faced in NI is how to encourage more companies, particularly our indigenous SMEs, to invest in R&D. It states that the main barriers to innovation activity in NI are as follows:

- Knowledge: Absorptive capacity; Intellectual Property; user knowledge, lack of communication, lack of information
- Incentives: Lack of competition; lack of inducements; lack of ambition
- Markets: Identifying opportunities; understanding opportunities; regulation; standardisation; access to markets; and language barriers
- Skills: Lack of leadership, technological, R&D and creative thinking skills
- Cultural Changes: Risk aversion; low levels of entrepreneurship; lack of understanding innovation; managing change; reluctance to collaborate

PA 1 of the ERDF Programme will address many of the needs highlighted by the EU Commission, by NIES and InnovateNI, and by detailed regional analysis on R&D expenditure undertaken to support the development of the Programme. PA 1 will undertake actions designed specifically to contribute to an increase in NI business expenditure on RD&I with the aim of increasing BERD as a percentage of GVA.

DEVELOPMENT NEED 1: ADDRESSING NORTHERN IRELAND'S RD&I NEED

The EU2020 RD&I Target

To develop a more productive and faster growing knowledge based economy capable of competing in world markets, further investment in research, development and innovation is required. Whilst an increase in RD&I expenditure in NI has occurred over recent years, performance continues to fall short of the EU2020 target of 3% by 2020. It also remains below many international competitors.

It is estimated that annual R&D spending might need to be around £870million in 2020 (an increase of almost £250million on 2012) just to maintain a share of the current (2012) 2.1% of GVA. To meaningfully increase RD&I spend as a proportion of GVA and to maintain a trajectory to the 2025 Innovation Strategy target, RD&I expenditure will actually need to be approximately £1bn by 2020. Thus demonstrating the ambition of the RD&I target set in the ERDF Programme.

The 2012 Position paper from the EU Commission identifies the promotion of business investment in RD&I as a priority area for funding support. The paper highlights the UK research base as a strength that should be exploited.

The InnovateNI strategy states that to successfully overcome barriers to innovation, support from the public sector is critical. This Operational Programme is designed to contribute to NI's RD&I ambitions with ERDF assistance of just under €113.5m to support BERD. This represents 38.38% of the Programme value (excluding Technical Assistance). It is anticipated that ERDF support will have a multiplier effect of between 3 and 4 to 1, therefore leveraging significant additional business investment in RD&I.

Proposed actions to be supported under PA 1 will be designed to contribute to an increase in NI BERD as a percentage of GVA from 1.4% in 2012 to between 1.7% and 2.0% by 2020, and between 1.8% and 2.1% by 2023. Investment of this scale has the potential to provide the stimulus necessary to deliver the level of change anticipated. Over the programme period, activity undertaken through PA 1 of the Programme will contribute up to €50m per annum in BERD. This contribution represents approximately 1/3 of the average annual increase needed to move BERD within the 2020 programme target range of 1.7% - 2.0%.

In addition, it is recognised that activities undertaken through PA 1 will not singlehandedly deliver the macroeconomic level change needed to meet the EU2020 target. However, they will form a critical element of a range of R&D&I interventions in the NI economy during the programme period (this will include, but not be limited to, Invest NI grant for R&D to sectors and companies not targeted in the ERDF programme, innovation vouchers, proof of concept and Knowledge Transfer Partnership (KTP) funding, Competence Centres supported through the Interreg V Programme, funding competitions overseen by the Technology Strategy Board/ Innovate UK, Horizon 2020 and COSME).

In addition, increased R&D expenditure as a portion of GVA will support the rebalancing of the NI economy by helping to grow the private sector, increase the business base, and widen and deepen the export base. Support will be required to encourage RD&I in more traditional sectors such as engineering and agri-food and, in so doing, move them up the value chain.

However, to achieve the level of change necessary, NI will need to focus support on sectors and projects with the greatest growth potential and engage more companies overall in the RD&I process.

Smart Specialisation

NI has completed a Smart Specialisation Strategic Policy Framework (S3 Framework). The S3 Framework and accompanying Innovation Strategy for Northern Ireland 2014-2025 (InnovateNI) were presented to the EU Commission on 19th September 2014. The S3 Framework recognises that NI has both the capability and the potential to compete on a global basis. The Framework identifies research and innovation priorities and opportunities that build on areas of regional specialisation and offer the best prospect to re-balance our economy through:

- Addressing global challenges and exploiting global opportunities in which Northern Ireland businesses can compete
- Developing expertise and building on existing key research strengths that lead to commercialisation
- Focusing on enabling technologies that develop competitive advantage for Northern Ireland businesses

The opportunities identified are high value added, cross sectoral and based on Key Enabling Technologies. These areas have been identified as having significantly high GVA, employment, export potential, high RD&I spend, higher wages and high levels of knowledge spill over.

The S3 Framework has been used to sharpen the focus of RD&I activity to be supported in the ERDF Programme. The emphasis of the programme is firmly on areas that offer high growth potential and that have the ability to contribute to the programme targets. In line with the Framework, the ERDF Programme will concentrate at least 75% of RD&I assistance under PA 1 on the following high growth opportunities:

- Stratified Medicine and Connected Health
- Advanced Engineering
- Electrical and Electronic
- Agri-Food Technology
- Computer Software and Services

Current analysis would suggest that approximately 150 companies across the opportunities identified by Smart Specialisation would be eligible for funding under PA 1 of the Programme. Given a NI business population of at least 113,000[25], this highlights the degree of concentration and focus that will be applied to activity under PA1.

There is also recognition that to grow the NI economy we need to be responsive to emerging high growth RD&I opportunities. Therefore, it is proposed that up to 25% of assistance under PA 1 will support new emerging opportunities that develop over the course of the programme period and have the capacity to support the delivery of the 2020 GVA target. This supports the principle that investment will be made in areas and sectors identified through an ongoing process of entrepreneurial discovery.

Engaging more businesses in RD&I

Both the NIES and InnovateNI strategies emphasise the need to encourage more companies in NI to undertake research, development and innovation. Whilst business expenditure on RD&I has increased significantly in NI, it remains heavily concentrated on a number of large companies. The Programme seeks to support, at a macroeconomic level, an increase in the number of businesses engaged in R&D to 700 by 2023. To feed into this macro-economic change, the Programme aims to support 200 NI businesses to engage in RD&I for the first time. This aligns closely with the aims and performance targets of both strategies.

The macro-economic and Programme targets have been determined through detailed analysis carried out by Departmental Economists to ensure that such an increase can be achieved, with ERDF support.

Actions

Actions to be supported will include:

- scoping, defining and planning an RD&I project which has the potential for commercialisation
- research or critical investigation aimed at producing new scientific or technical knowledge with clear short to medium term potential for commercialisation
- product or process development or improvements
- development of leading edge technology for commercial benefit
- contracted research
- linking to a college or university to carry out specific projects with the potential for commercialisation
- product / service design

Outcome

Actions under PA 1 will contribute to an increase in total BERD as a percentage of GVA from 1.4% in 2012 to between 1.7% - 2.0% by 2020, and between 1.8%-2.1% in 2023. This in turn will contribute to the EU 2020 target of raising combined public and private investment levels in RD&I to 3% of GDP.

DEVELOPMENT NEED 2: EVIDENCE OF NORTHERN IRELAND'S SME COMPETITIVENESS NEED

The Role of SMEs

The SME sector plays a key dynamic role in generating growth. SMEs tend to dominate new and fast growing businesses. The SME sector is where many important entrepreneurs and firms of the future get started. Most large firms have grown from small businesses, so a healthy SME base helps to determine the future supply of large firms in an economy[26].

The vast majority (99.8%) of businesses in Europe are SMEs. In 2012 SMEs accounted for 66.5% of all European jobs. The SME sector as a whole delivered 57.6% of the gross value added generated by the private sector in Europe during 2012. The role of SMEs is crucial for the European economic recovery as their number, employment capacity and value added constitute a large share of the European economy, and concludes that providing the right conditions in which SMEs can flourish is paramount for ensuring a sustained recovery and achieving prosperity for all EU citizens[27].

Northern Ireland SMEs

The NI economy reflects the broader EU position as an economy dominated by SMEs. Over 99% of businesses in NI have 0 to 249 employees[28]. However in NI SMEs contribution to GVA is much more significant than the EU average – accounting for about 82% of GVA[29] compared to 58% for the EU[30].

The vast majority of SMEs in NI do not meet the high growth definition. Yet they still make a hugely valuable contribution to the economy. On average non-high growth SMEs have created 14,000 additional new jobs in each three-year period since 2000. This represents 45% of SME jobs created.

Whilst small businesses have recorded growth in external sales (particularly to the Great Britain and Republic of Ireland markets), they remain heavily reliant on the internal market with 54.3% of sales made within NI[31]. A key focus of the ERDF Programme

will be to create jobs, which are a tangible indicator of business growth and expansion. In order to expand and grow and sustain and create jobs, NI businesses must access new markets either on a regional, national or international stage. In 2012 goods exports were valued at £5.7bn, just under 2% of the UK total, the lowest share across the UK regions. While exports as a share of the region's value-added (GVA) is just below the UK average it is well below other small UK regions such as the North East and Wales. It is clear that Northern Ireland's export base remains small, and support will be provided, through the ERDF Programme, for businesses to develop their capabilities and explore new market potential.

Micro, small and medium sized businesses [2] account for 57% of total employment in NI. As shown in Figure 2 in the Documents section, this is well above the UK average of 43% and above every other UK region.

In addition, within the SME sector, NI has a particular predominance of small and micro businesses. This again reflects a broader EU wide picture[32]. These businesses are responsible for more than half of the private sector economic activity in the region.

It is noted that the economic downturn has had a more severe impact on SMEs in NI than in the UK overall. SME employment has fallen by 10% with turnover decreasing by 9% during the 2010-13 period. UK SMEs, in contrast, experienced growth of 6% and 1% respectively over the same period.

The decline in SME employment over this period comes at a time when overall private sector employment has also been falling. However, as shown in Table F in the Documents section, the 10.4% contraction in NI SME employment was over double the fall in overall private sector employment of 4.6%. This has mainly been experienced by smaller firms – the decline in medium sized employment was much less pronounced.

Given the importance of the SME base to the NI economy, and the greater impact of the economic downturn on micro and small businesses in NI, PA 2 of the ERDF Programme will include a range of actions designed to increase the capacity of micro and small SMEs (0 – 49 employees) to improve competitiveness, grow, export and create jobs.

Significant consideration has been given to which result measurement will best capture growth of NI SMEs of the period of the programme. Many measurements have been considered (SME turnover, SME productivity, start up rates), but as the focus of the programme is specifically on growing NI micro and small enterprises, the most accurate measurement of growth is jobs created.

One of the EU2020 targets is to achieve a 75% employment rate amongst 20-64 year olds. Whilst this target has not been highlighted in the UK National Reform Programme and is therefore not a specific objective for the Programme, actions under PA 2 will seek to address the more severe regional impact of the economic downturn on NI SMEs. Actions will therefore also support the EU2020 target of 75% of the 20-64 year-olds to be employed by seeking to contribute to an increase employment levels in micro and small enterprises.

Northern Ireland High Growth SMEs

High growth firms[33], i.e. SMEs experiencing at least 20% annual growth rate in employment or turnover for at least 3 years, can have a disproportionately significant impact on the economy through a positive long-term contribution to economic competitiveness and structural change[34].

NESTA estimate that just 6% of UK businesses generated half of the new jobs created by existing businesses in the UK between 2002 and 2008[35]. These businesses are high growth firms.

Even during the downturn when the NI economy was contracting, there was a cohort of firms still experiencing high growth. The Independent Review of Economic Policy[36] report identified that while industrial support had helped enhance the growth of small businesses, especially within manufacturing, NI has not been able to sufficiently create many exceptional ‘high-flying’ companies. This is problematic, as both new and existing enterprises which enter into dynamic growth processes help to boost the general level of competitiveness and productivity.

From 2000 to 2013, high growth SMEs accounted for just 16% of total NI SMEs, yet contributed 61% of all jobs created over the same period. On average high growth SMEs have created 21,000 additional new jobs in each three-year period since 2000. Employment growth in high growth companies during the period 2010 – 2013 contributed 30.8% of the employment growth despite high growth companies comprising only 1.3% of businesses employing 10 or more.

However, the number of high growth firms in NI has been falling. High growth firms in NI increased from 2000-03 to a peak in 2004-07, before the effect of the economic downturn led to consistent falls each year to 2010-13. This is highlighted in Table G in the Documents section. Table G also demonstrates that SME high growth firms account for over 96% of all OECD defined high growth firms in NI.

Table H [37] in the Documents section provides an illustration of the employment levels associated with High Growth SMEs from 2000-2013.

SME Access to Finance

It is widely recognised that access to finance is one of the key drivers of high growth.

The stock of UK lending to SMEs has been contracting since 2009. However, through the National Reform Programme the UK Government is committed to encouraging further private investment in business finance, particularly for small and medium enterprises (SMEs) and high-growth companies to deliver a sustainable economic recovery[38].

The NIES recognises regional specific constraints related to access to finance. The strategy states that NI based SMEs tend to be more reliant on bank based lending as a source of finance than other UK regions. In addition, like other peripheral economies, NI has historically suffered from a lack of venture capital and debt finance markets. This can be attributed to a number of factors, including the relatively small size of the region, a historically conservative approach to business growth, reluctance by some business owners to sacrifice equity and the relatively modest size of potential deals.

According to research undertaken by InterTradeIreland, 94% of total SME finance for both NI and Republic of Ireland SMEs came from bank funding[39]. In comparison to European SMEs, NI SMEs demonstrate an overreliance on short term bank finance with a disproportionately high use of overdrafts.

In NI there is also a widespread perception amongst local businesses that the market is failing in the supply of debt finance to SMEs[40]. At present only 9% of NI based SMEs perceive it to be easy to access finance needed. This is the lowest level of all UK regions (the next lowest being the West Midlands at 37%)[41].

The issue of SME access to finance in the UK is recognised by the European Union and has been echoed in successive CSRs issued by the Council of the European Union in the context of the European semester during the period 2012-2014.

In the UK CSR of 2012[42], it was reported that ‘UK net lending to the corporate sector was negative in 2011, while survey evidence showed that a significant number of UK SMEs were credit-constrained’. It was also noted that ‘access to non-bank lending

remained largely restricted to bigger firms’, and ‘a substantial ongoing financing gap is anticipated over the next five years, especially for SMEs’.

The 2012 CSR recommended that the UK take steps to further improve the availability of bank and non-bank financing to the private sector, in particular to SMEs, and to explore ways to improve access to venture and risk capital and other forms of non-bank lending.

The 2013 CSR highlighted that net lending to the corporate sector remained negative in 2012. While larger firms with strong balance sheets are able to borrow at historically low cost, many other firms, particularly SMEs, are having difficulty accessing credit. This is exacerbated by limited competition in the banking industry.

The 2013 CSR recommended that the UK take further steps to improve the availability of bank and non-bank financing to the corporate sector, while ensuring that the measures primarily target viable companies, especially SMEs.

The 2014 CSR highlighted that in terms of access to finance, while conditions in credit markets have improved in 2013, credit growth remains weak and existing policies need more time to show that they have been successful. Particular challenges regarding access to credit remain for SMEs. While large firms can finance themselves directly in wholesale markets and profit from the well-developed financial services offer of the United Kingdom, SMEs largely rely on banks to obtain their external funding.

The 2014 CSR recommended that the UK take action to address structural bottlenecks related to access to finance for SMEs to boost growth in the export of both goods and services and continue efforts to improve the availability of bank and non-bank financing to SMEs. It should ensure the effective functioning of the Business Bank and support an increased presence of challenger banks.

PA 2 of the ERDF Programme will contribute towards addressing the need highlighted by the EU Commission to improve access to finance for SMEs – particularly companies that can demonstrate high growth potential. Specifically PA 2 will include a suite of financial instruments designed to accelerate the expansion of high growth SMEs with export potential.

DEVELOPMENT NEED 2: ADDRESSING NORTHERN IRELAND'S SME GROWTH NEEDS

The EU2020 SME Position

The NI Executive is committed to improving the economic competitiveness of the economy. The NI Economic Strategy recognises that the economy has a strong indigenous SME base that makes a larger economic contribution than anywhere else in the UK. The Strategy acknowledges that NI must encourage these small businesses to enter new markets regionally, nationally and internationally. The programme will encourage these companies to become more involved in high-value activities, to grow, to be more competitive, to employ more people and to add more value to the local economy.

The Commission's 2012 Position Paper identifies the need to improve the availability of finance to the private sector (especially SMEs). The Commission paper concluded that CSF Funds should help to increase SME competitiveness and back entrepreneurship, in particular in export-related sectors, through the provision of funding, in particular non-bank finance (financial engineering) and business advisory services.

This Operational Programme is designed to support NI's ambition to increase the number of high growth firms in our economy and to increase employment in micro and small enterprises that play a disproportionately important role in the NI economy. It is anticipated that ERDF assistance of just over €91m will be used to support Financial Instruments, while €44.5m will be used to provide a range of SME business supports. Collectively this targeted assistance seeks to increase the competitiveness of NI SMEs with ERDF assistance of €135.6m. This represents just under 46% of the Programme (excluding Technical Assistance).

Actions to be supported under PA 2 will be designed to increase employment in NI micro and small enterprises and increase the number of high-growth firms that are capable of creating new jobs and increasing productivity. In addition, increased employment across

the micro and small business base and increased numbers of high growth firms will support the rebalancing of the NI economy by helping to growing the private sector.

Ex-ante assessment of Financial Instruments

The NIES notes that a key route to growing successful businesses is ensuring SMEs have adequate access to finance to support their business plans.

In preparing the ERDF Programme, an ex-ante assessment of Financial Instruments in NI was completed by RSM McClure Watters on behalf of the Department of Enterprise, Trade and Investment (as Managing Authority for the ERDF Programme).

The ex-ante assessment considered in detail the existing equity / loan provision and recommended a suite of Financial Instruments be supported with ERDF funding. These Instruments will seek to address the gap identified through the ex-ante assessment by providing appropriate sources of finance to support high growth potential SMEs.

Growing jobs in micro and small businesses

SMEs play a vital role in the NI economy. However it is recognised that the economic downturn has had a very specific negative regional impact on SMEs.

This has resulted in a sharp fall in employment in micro and small enterprises. It is essential that NI SMEs continue to grow and be more competitive in regional, national and international markets. This programme will therefore contribute to the creation of at least 31,000 jobs in micro and small enterprises in NI by 2023 through a range of interventions designed to enhance the competitiveness of micro and small enterprises.

Actions

Actions to be supported will include:

- a university fund
- a seed fund
- a co-investment fund
- a development fund
- a loan fund

- product development
- business planning process support
- improved business efficiency
- advice on business start-up, growth and exports
- advice on supply chains and distribution
- marketing and sales

Outcome

Actions under PA 2 will enhance the competitiveness of NI SMEs and in so doing will support an increase in the number of high growth companies in NI from 695 to between 1,300 and 1,500 by 2020, and between 1,600 and 1,800 by 2023.

Actions under PA 2 will also support an increase in employment in micro and small enterprises with growth potential from 297,000 to between 323,000 and 329,000 by 2020, and between 328,000 and 334,000 by 2023. Whilst the UK does not specifically reference the EU2020 employment target within its National Reform Programme, supports provided under Priority Axis 2 will certainly result in increased employment and will therefore support the achievement of the EU2020 employment target i.e. 75% of the 20-64 year-olds to be employed.

SUSTAINABLE GROWTH

The Europe 2020 strategy seeks to promote sustainable growth by promoting a more resource efficient, greener and more competitive economy. The EU 2020 strategy sets three climate change / energy targets – including 20% increase in energy efficiency.

NI shares this ambition to develop a more resource efficient, greener economy and is committed to maximising the potential of its natural renewable energy resources[43] such as onshore and offshore wind, tidal and hydro power, geothermal, solar, biomass, and bio fuel, whilst simultaneously reducing overall energy demand through energy saving initiatives.

The 2010-2015 NI Programme for Government set an interim target 20% of electricity consumption to be generated from renewable sources by 2015. Latest available figures confirm that 25.4% of total electricity consumed in the 12 month period from January 2015 to December 2015 was generated by renewable sources, predominately wind generation, thereby exceeding the interim target set.

Targeting energy efficiency in social housing and low carbon urban mobility initiatives will contribute towards further reductions in overall energy demand.

DEVELOPMENT NEED 3: – Energy Efficiency

Northern Ireland Carbon Energy

NI is located on the western periphery of Europe with few fossil fuel resources.

Historically this has created a near 100% dependence on imports to meet energy needs.

Currently 80% of NI's final electricity consumption is generated from non-renewable sources. The high proportion of fossil based fuels in the energy mix creates a significant carbon footprint which contributes to the problems of climate change.

With energy efficiency recognised as one of the most cost-effective means to combat climate change, targeting energy efficiency in social housing and low carbon urban mobility initiatives will contribute towards further reductions in the region's overall energy demand, thereby presenting NI with the opportunity to significantly reduce current levels of harmful emissions.

The NI Executive has also endorsed the Strategic Energy Framework (SEF) 2010, published by DETI. The SEF sets out an ambitious target that by 2020, 40% of the electricity consumed in NI should be generated from renewable sources.

The SEF sets a target of 35% in the reduction of NI's carbon emissions on 1990 levels by 2025.

The Department for the Economy (DfE) recognises the pivotal role that energy efficiency plays in maximising the value we get from the energy we use. Everyone benefits when energy is used more efficiently – consumers save money, demand is reduced and environmental impacts are minimised. At present a number of NI government Departments and agencies have clear statutory roles in relation to energy efficiency, including the Department for Finance (DoF), the Department for Communities (DfC) and the Department for Infrastructure (DfI). DfE has sought to play a co-ordinating role.

The EU Air Quality Directives are transposed in Northern Ireland by the Air Quality Standards Regulations (Northern Ireland) 2010. These regulations place a duty on NI government departments to monitor levels of air pollutants specified in the Air Quality Directives, and ensure compliance with limit values for these pollutants.

In May 2010, the Northern Ireland Executive agreed to a proposal by the Minister of the Environment to establish a cross departmental working group on climate change. In

February 2011, the Northern Ireland Executive approved a Northern Ireland Greenhouse Gas Emissions Reduction Action Plan, which examined relevant policies and actions across the Executive, identifying the projected impact on emissions and the economy and therefore provided an overall indication of Northern Ireland's emissions in 2025. One of the actions identified in the Action Plan was for a Cross Departmental Working Group on Climate Change to provide an annual report to the Executive on progress towards greenhouse gas emission reductions. The fourth Annual Progress report was presented to the Executive in May 2015.

The latest emission figures available for Northern Ireland, set out in the Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland: 1990 - 2013, estimate the 2013 Northern Ireland emissions at 22 million tonnes of carbon dioxide equivalent (Mt CO₂e); with 29% from agriculture, 18% from transport, 18% from energy supply and 13% from the residential sector. These emissions represent 4% of the UK total. Overall, emissions have fallen 16% in Northern Ireland since 1990, compared to 30% across the UK as a whole. Using this data, the latest greenhouse gas (GHG) emissions reduction projection, produced in December 2015, forecast a 34.1% reduction in emissions (excluding land use, land use change & forestry) by 2025 against 1990 baselines.

Following advice from the Committee on the appropriateness of climate change legislation in Northern Ireland, a specific Northern Ireland Climate Change Act is being developed.

The aim of the Northern Ireland Executive's Strategic Energy Framework 2010 is to achieve a competitive, sustainable future for energy in Northern Ireland and included interim objectives for 20% renewable electricity consumption and 4% renewable heat by 2015. These have been achieved. Having achieved its interim renewable targets of 20% renewable electricity and 4% renewable heat, longer term objectives in the Executive's Strategic Energy Framework are currently being reviewed.

United Kingdom Position

At a national level, the UK Government is required to achieve European Union (EU) air quality limit values in accordance with the schedules prescribed in the Ambient Air Quality Directive (2008/50/EC) and daughter directives. In these directives, the deadline to achieve the limit values for nitrogen dioxide (NO₂) was given as 1st January 2010.

The 2012 Country Specific recommendations note that the UK has a challenge to improve its energy and transport infrastructure, which is linked to laying the foundations for long-term growth and competitiveness, and to addressing the causes of the UK's lack of external competitiveness in manufacturing sectors.

The Climate Change Act commits the UK government to 34% emission reductions by 2020 based on 1990 levels. The UK is also signed up to the EU Energy and Climate Framework that commits to reduce GHG emissions by 40% by 2030. The EU, representing the 28 member states, is committed to meeting this target as part of the

global agreement reached in Paris in December 2015 to limit rises in global temperature to 2°C. NI needs to continue to contribute towards the UK and EU climate change targets and implement goal 13 of the UN 2030 sustainable development goals, which requires us to take urgent action to combat climate change and its impacts.

DEVELOPMENT NEED 4: ADDRESSING ENERGY EFFICIENCY & FUEL POVERTY IN THE SOCIAL HOUSING SECTOR

The UK needs substantial investment to meet its renewable energy obligations and tighter carbon emissions standards.

The UK housing stock is relatively old with government estimates showing that 38% of GHG emissions in the UK come from energy inefficient buildings.

Lower energy consumption can result in less pollution, a better environment and lower costs for the public sector. Some of the main drivers for energy efficiency savings are EU and UK energy targets which include the following

- The European Union (EU) has set an ambitious primary energy saving target of 20% by 2020, against a 2007 business as usual projection.
- The UK's 2008 Climate Change Act established the world's first legally binding climate change target. The aim is to reduce the UK's greenhouse gas emissions by at least 80% (from the 1990 baseline) by 2050.
- The NI Executive's Programme for Government (PfG) target to continue to work towards a reduction in greenhouse gas emissions by at least 35% on 1990 levels by 2025.
- The Strategic Energy Framework, endorsed by the NI Executive, set targets of 40% of electricity consumption to be from renewable sources and a 10% renewable heat target by 2020.

The EU Energy Efficiency Directive (2012/27/EU) establishes a common framework of measures to promote energy efficiency across different sectors of the economy throughout the EU. The UK's National Energy Efficiency Action Plan sets out how the implementation of the Energy Efficiency Directive will help to achieve energy efficiency.

For example:

Article 3 requires each Member State to set an indicative national energy target. The UK's target was set in April 2013 at 129.2 million tonnes of oil equivalent (Mtoe) for final energy consumption on a net calorific value basis. This represents an 18% reduction in final energy consumption, relative to the 2007 business – as usual projection.

There is a pressing need to address the poor energy efficiency of much of the social housing stock in Northern Ireland in order to contribute to energy efficiency and fuel poverty targets. A particular issue is that 42% of households in Northern Ireland suffer from fuel poverty.

In 2011, the Department for Social Development NI commissioned an independent review of fuel poverty in the region– how it is defined and how it is tackled. This was carried out by researchers from the University of Ulster (Liddell, Morris, Rae & McKenzie, 2011). The independent review demonstrated that, of those in fuel poverty, a total of 32,000 households in Northern Ireland were in either severe (15-20% needs to spend) or extreme (>20% needs to spend) fuel poverty, representing more than 11% of all households that are in fuel poverty – a substantial minority.

Whilst a range of initiatives are available these are not being accessed by people living in areas of deprivation; despite a proactive approach to tackling fuel poverty, government departments have found it increasingly difficult to assist households due to a low level of self-referral from these households.

The magnitude of the challenge dwarfs the available funding and there is a need to target resources. There is a need for intervention for those households with lower incomes or those facing issues of deprivation, in particular where the incentive to invest in energy efficiency measures is less clear as they may have poor credit history, or lack finance for associated upfront costs.

The 2015 NI Housing Executive Landlord Assets Management Strategy identified the need for a separate strategy to look at the needs of the NI Tower Blocks portfolio, primarily to identify the key principles for taking an asset management approach tailored specifically for these properties.

The NI Tower Block housing stock comprises of 32 blocks with 1,912 individual properties, of which 1,629 are tenanted, 275 sold leasehold units, and 8 used for other purposes, such as caretaker offices.

These tower blocks date from the 1960s when they were constructed to facilitate the slum clearance programmes and increase the provision of modern housing.

A particularly significant issue with the tower blocks is their poor thermal insulation qualities in comparison to traditionally built stock, which makes them very expensive to heat for tenants. A recent survey included a review of energy efficiency across the tower block portfolio, as measured by SAP ratings. In general the SAP ratings for the Tower Blocks are lower than the overall average for the stock which is just over 57. Exceptions where two blocks with SAP ratings of between 63 & 65, largely due to the installation of gas heating in these blocks. The nature of construction makes it difficult and expensive to improve the thermal quality of the blocks.

Key outcomes –

More than 42% of people in Northern Ireland live in fuel poverty, a figure more likely to rise than fall. In the social housing sector this figure rises to 50%. People cannot afford to heat their homes adequately.

This is a serious situation and one which requires a combined effort to tackle

Through supporting efforts in relation to fuel poverty, a targeted programme of improving insulation in properties identified via SCS as having a poor SAP rating will deliver:

Improved energy efficiency rating of households facing severe fuel poverty

Provision of these works will reduce residents' use of their heating systems resulting in a corresponding reduction in energy use and CO2 emissions. This will be measured by taking the SAP ratings for the accommodation before and after the works and translating the post-works increase in the SAP scores into savings in emissions.

UK National Energy Efficiency Action Plan

The UK NEEAP Refers specifically to Northern Ireland's strategic approach and range of domestic energy efficiency programmes to promote increased energy efficiency in the domestic sector.

The UK indicative target is a reduction of 18% of final energy demand by 2020.

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

DEVELOPMENT NEED 5: Addressing the need to shift to low carbon public transport.

Belfast is one of the most congested cities in the UK and there is a need for a mode shift from private cars to low carbon public transport ensuring reduced overall traffic volumes.

Transportation provides the essential link between production, distribution and consumption which underpins all economic activity. It also has a much wider impact on competitiveness with the potential to help economic prosperity through improved connectivity, reduced congestion, improved journey times and reliability, and increased accessibility. Access to markets and labour supply, accommodation and transport links are generally the most important factors driving decisions on business location for all business sectors.

The UK Cities Monitor 2008 survey indicated that transport was the primary concern when the business community was asked how cities could be improved. Particular areas identified for improvement included inter-urban transport links, public transport and congestion.

Like many other UK cities, Belfast city centre suffers from significant traffic congestion, particularly at busy times. This is caused by high volumes of traffic accessing and traversing the city centre area competing with the many demands placed on a busy city centre such as public transport access, on-street parking, and commercial loading/unloading activities.

Traffic congestion in the city centre causes delays and unreliable journey times not only to general traffic but also to people accessing the city centre by public transport. It also creates severance and reduces the quality of the city centre environment for pedestrians and cyclists. Much of the general traffic could use alternative routes around the central area.

A transformative change in both the efficiency and functionality of transport infrastructure is needed to stimulate and support regional economic growth and competitiveness.

A key strategic investment is the Belfast Rapid Transit System (BRT), a new low carbon bus-based public transport service that will address current and future transport needs in Belfast and support sustainable economic growth and regeneration. The overall vision is to develop a rapid transit system for Belfast which will contribute to the realisation of the vision for low carbon public transport, namely to:

- Encourage modal shift away from non-essential car use by providing a safe, economic and reliable alternative;
- Encourage greater use of public transport in support of the Government's economic, social and sustainability objectives;
- Support economic growth and provide high quality access to and between new land use developments in the city;

BRT will provide a modern, safe, efficient and high quality service which will encourage people to travel by public transport instead of by car.

BRT will provide fast and reliable services connecting East and West Belfast, Titanic Quarter and key locations of economic, welfare and social activity in the city centre and the corridors served by the system. Cross-city services will operate via the city centre and integrate with existing public transport services to deliver a multi-modal urban transport system, thereby maximising opportunities for interchange.

BRT vehicles will provide a substantive increase in passenger capacity and utilise low carbon hybrid technologies to deliver better services for passengers while simultaneously cutting carbon emissions and delivering economic growth. Public transport in Northern

Ireland is delivered by Translink and this will be the first time low carbon hybrid technologies will be utilised by that entity.

Depot - The existing Public Service Vehicle (PSV) depot is not suitable for operating a modern and improved transport system and the current location is not suitable as it is unable to accommodate the technological requirements for the hybrid vehicles to be used on the BRT routes. There are also a number of economic and efficiency issues including poor thermal performance; energy inefficiency – lighting and heating; asbestos construction materials; poor condition of building fabric and degradation of roof-light fabric. A suitable depot of the required scale cannot be developed on the current site and a need exists for a new bespoke depot that can provide the necessary technological requirements, applying the most up to date energy efficient technologies.

Ticketing System - The premise of a rapid transit system is to increase the use of public transport and improve journey times through a number of actions including the introduction of bespoke traffic lanes and improved access/egress to the vehicles. The current public transport provision involves conventional vehicles which have a single point of access/egress to an on-board ticket validation system operated by the vehicles operative.

This results in passengers wishing to board the vehicle having to allow other passengers to alight before boarding the vehicles which results in, particularly at peak times, queues at stops and delays to the service.

The introduction of off board ticketing will make a significant contribution to increasing public transport usage and improving journey times by a predicted 25-30% and journey times are a major factor in encouraging private car users to switch to Public transport for travel to, from and within the city.

A real-time information system will also be installed both on vehicle and at all stops along the BRT route.

Key Outcomes

The ERDF investment in the depot and ticketing infrastructure will affect a change in behaviour through investing in more active, sustainable and public routes to work.

Through delivery of the investment a number of key outcomes will be realised:

- Reduction of emissions along the routes of the BRT, leading to improved air quality of the region;
- Reduction of public transport journey times on key routes into and out of Belfast;
- Increased numbers using public transport along the developed routes;
- Reduction of traffic volumes on key arterial routes into and out of Belfast;
- Improved urban mobility and accessibility to employment, hospitals, schools and colleges within Belfast City Centre;
- New public transport linkages developed with the Titanic Quarter urban-waterfront regeneration scheme; and
- Improved interoperability between road and rail public transport services in Belfast City Centre.

Introduction of a rapid transit system is a key element in the delivery of a step change in the quality of, and transformation towards low-carbon dominant public transport in Belfast, complementing increased investment in public transport. A good public transport system is crucial to the promotion of competitiveness and sustainable development and it also assists in delivering an environmentally sustainable economy.

Rapid transit is considered a key supporting driver for regeneration throughout Belfast, providing high quality access to and linkages between jobs, hospitals, schools and colleges across the city.

It will contribute to improving the quality of life, improving traffic flows, adding key infrastructure and maintaining Belfast's role as the major economic driver for the region.

Regional Transportation Strategy

The High Level Transport Aims contained within the Regional Transportation Strategy document, published in March 2012, are driven by the NI Executive's priorities of

growing the economy, while supporting society and protecting the environment; they link directly to the aims of the new Regional Development Strategy

The High Level Transport Aims are to:

- Reduce Environmental Impact of Transport ;
- Support the Growth of the Economy; and
- Enhance the Quality of Life for All.

The need for BRT is also articulated through the four relevant underlying Strategic Transport Objectives which are:

- To improve connectivity by optimising the use of multi-modal transport solutions;
- To use road space and railways in ways that are more efficient and environmentally friendly;
- To improve access within, to and from our towns and cities; and
- To improve accessibility to key tourism sites.

In environmental terms the need for BRT is justified against the underlying Strategic Transport Objectives of:

- Reducing Greenhouse Gas Emissions from Transport; and
- Reducing Noise and Air Pollution.

Need for BRT is also expressed in terms of “Enhancing the Quality of Life for All” in terms of two relevant underlying Strategic Transport Objectives which are to:

- Improve Safety; and
- Improve Social Inclusion

The performance of bus services in urban areas continues to be closely scrutinised both internally and externally, with perceptions that see buses as both part of the congestion problem and the solution to it. Nowhere is this more the case than in central Belfast where bus dwell times at key city centre stops are a major passenger, political and operational issue when combined with the wider delays caused by general congestion. As a consequence a number of strategic plans have been developed specifically addressing this issue.

Belfast City Council Air Quality Action Plan adopted December 2015 - www.belfastcity.gov.uk/airquality identifies four Air Quality Management Areas in places where the air has been affected by pollution, principally nitrogen dioxide (NO₂) from road transport. These are located along the Westlink Corridor, Ormeau Road, Upper Newtownards Road and from Cromac Street to the Short Strand. This plan looks at all forms of air quality and transport planning activities, including sustainable transport options and engineering solutions.

This is further underpinned by the UK level Air Quality Plan for the achievement of EU air quality limit value for nitrogen dioxide (NO₂) in the Belfast Metropolitan Urban Area (UK0028) - <https://uk-air.defra.gov.uk/assets/documents/no2ten/UK0028.pdf>

The UK Low Carbon Transition Plan also specifically refers to NI stating that road transport is the largest source of greenhouse gas emissions in NI, accounting for 29% of total carbon emissions. Delivering reductions in greenhouse gas emissions from road transport, while ensuring the provision of transport arrangements that meet economic and social needs, presents a significant challenge. Reconciling these potentially competing priorities is a key objective. Plans envisage a significant level of investment in public transport, including BRT. Planned investment in buses, trains and related facilities aims to promote increased utilisation of public transport and reduce dependency on the private car, thereby contributing to climate change targets. To facilitate progress in this area, actions will continue to promote behavioural change and more sustainable modes of travel.

A number of other supporting strategic documents also reference the need for BRT in terms of improving the carbon footprint and enhancing economic prosperity. These include:

- The Northern Ireland draft Programme for Government (PfG) which includes an indicator for improvement of air quality.
- NI transportation strategies such as *Ensuring a Sustainable Transport Future: A New Approach to Regional Transportation*.
- Building a better future - Investment Strategy for Northern Ireland – <http://isni.gov.uk/PDFs/Investment%20Strategy.pdf>

[1] This includes the anticipated Performance Reserve

[2] Small Enterprises are those employing 10 – 49 people. Micro Enterprises are those employing 0 – 9 people.

[3] DEL, as Managing Authority for the ESF programme, has advised that these figures may change following the outcome of the reviews of apprenticeship and youth training currently underway. Table D refers.

[4] NI Economic Strategy: Priorities for Sustainable Growth and Prosperity:
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[6] Innovation Strategy for Northern Ireland 2014-2025: https://www.economy-ni.gov.uk/sites/default/files/publications/deti/Innovation-Strategy-2014-2025_2_0.pdf

[7] Innovation and Research Strategy for Growth, Department for Business Innovation and Skills, December 2011:
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[10] Northern Ireland Research and Development Statistics, December 2013:
https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/rd-2013-publication-final_0.pdf

[11] $GVA + \text{taxes on products} - \text{subsidies on products} = GDP$

[12] Regional Gross Value Added (GVA) for 2012 – Office for National Statistics

[13] Northern Ireland Research and Development Statistics, December 2013:
https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/rd-2013-publication-final_0.pdf

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<http://www.oecd.org/sti/outlook/e-outlook/sticountryprofiles/germany.htm>

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<http://www.oecd.org/unitedstates/sti-outlook-2012-united-states.pdf>

[18] The UK R&D Landscape, UK-Innovation Research Centre, March 2012:
<http://www.cbr.cam.ac.uk/pdf/RDlandscapeReport.pdf>

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<http://www.cbr.cam.ac.uk/pdf/RDlandscapeReport.pdf>

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[42] Country Specific Recommendations (CSR) paper 9th July 2013: http://ec.europa.eu/europe2020/pdf/csr2014/csr2014_council_uk_en.pdf

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1.1.2 A justification for the choice of thematic objectives and corresponding investment priorities having regard to the partnership agreement, based on an identification of regional and, where appropriate, national needs including the need to address the challenges identified in relevant country-specific recommendations adopted in accordance with Article 121(2) TFEU and the relevant Council recommendations adopted in accordance with Article 148(4) TFEU, taking into account the ex-ante evaluation.

Table 1: Justification for the selection of thematic objectives and investment priorities

Selected thematic objective	Selected investment priority	Justification for selection
01 - Strengthening research, technological development and innovation	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation	<p>The NIES Strategy recognises the vital role innovation and R&D plays in economic development.</p> <p>The Strategy concludes that increasing Business Expenditure on Research and Development (BERD) as a percentage of GVA is essential in rebalancing the NI economy.</p> <p>The EU2020 target is to raise combined public and private</p>

Selected thematic objective	Selected investment priority	Justification for selection
	through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies	<p>investment levels in RD&I to 3% of GDP. NI continues to fall short of this target.</p> <p>In 2012, NI BERD was 1.4% of GVA. In 2012 NI GERD was 2.1% of GVA.</p> <p>The S3 Framework pinpoints a number of key opportunities that offer enhanced growth potential and maximum economic return through increased RD&I.</p>
03 - Enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector (for the EAFRD) and the fisheries and aquaculture sector (for the EMFF)	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes	<p>High growth SMEs account for just over 16% of the total SMEs in NI since 2000, yet have contributed 61% of all new jobs over the same period.</p> <p>The number of high growth SMEs in NI has fallen from 1,535 in 2007 to 695 in 2013.</p> <p>NI is a SME dominated economy. SMEs offer significant growth potential. However micro and small enterprises have suffered disproportionately as a result of the economic downturn with marked job losses.</p>
04 - Supporting the shift towards a low-carbon economy in all sectors	4a - Promoting the production and distribution of energy derived from renewable sources	TO 4a has been replaced with 4c and 4e
04 - Supporting the shift towards a low-carbon economy in all sectors	4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector	<p>NI needs to reduce its reliance on fossil fuels, particularly in communities susceptible to fuel poverty.</p> <p>The UK housing stock is relatively old and the government estimates that 38% of GHG emissions in the UK come from energy inefficient buildings.</p> <p>Northern Ireland 2011-15 PfG target is to reduce GHG emissions by 35%</p>

Selected thematic objective	Selected investment priority	Justification for selection
		<p>on 1990 levels by 2025.</p> <p>Assisting households to reduce energy consumption through energy efficiency measures will help reduce harmful emissions and assist in the fight against climate change and allow consumers to heat their homes for less.</p> <p>Poor energy efficiency of NI social housing stock.</p> <p>Need for intervention for households with lower incomes or facing issues of deprivation.</p>
<p>04 - Supporting the shift towards a low-carbon economy in all sectors</p>	<p>4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures</p>	<p>In pursuit of developing its competitive economy, NI needs to exploit potential for low carbon technology and energy as a significant growth and employment opportunity.</p> <p>Private transport is one of the main CO₂ & particle emitters in the Belfast urban area. NI needs to address the attractiveness of public transport to urban/commuter transport users to lower carbon and active options.</p> <p>Transport is a key sector of emissions to address through behavioural change. Inclusion of low carbon will focus on linking existing types of low carbon modes of transport at a regional level, making them more attractive to use.</p> <p>Reducing congestion is particularly important in central Belfast where there is significant traffic congestion and perceived issues of slow boarding times of buses.</p> <p>Results from research by Translink show that between 2009-12 Translink achieved a 29% reduction in average boarding times. This</p>

Selected thematic objective	Selected investment priority	Justification for selection
		directly correlates to an increase of 21% in commercial smartcard transactions over the period.

1.2 Justification for the financial allocation

Justification for the financial allocation (Union support) to each thematic objective and, where appropriate, investment priority, in accordance with the thematic concentration requirements, taking into account the ex-ante evaluation.

Approximately **36.23% of the ERDF allocation is allocated towards TO 1**, because RD&I has been recognised by the NI administration as a priority in rebalancing the economy. From a very low base, NI has made recent advances in expenditure on RD&I. However significant further work is required to meet the EU2020 target.

The Commission's 2012 Position Paper to the UK sets out key country-specific challenges and presents the Commission's views on the main funding priorities for the UK for growth-enhancing public expenditure. The paper states that one of the most pressing challenges to be addressed by the UK is stagnant investment in R&D. According to the Commission, this underinvestment threatens to undermine the UK's competitiveness.

The ERDF Programme will target support at strategic opportunities identified by the S3 Framework that have the potential to deliver maximum economic return. In addition, the Programme will increase the number of companies engaged in RD&I. Through a focused approach, ERDF funding has the capacity to make a significant contribution to supporting NI meet the EU2020 target to raise combined public and private investment levels in RD&I to 3% of GDP.

Approximately **44.96% of the ERDF allocation is allocated towards TO 3**, because it is essential that we improve the competitiveness of NI's SMEs. The NI administration has prioritised encouraging business growth and competing in the global economy as key themes to achieving growth in the private sector and rebalancing our economy.

Over two thirds of ERDF funds in TO 3 will be directed towards Financial Instruments and Access to Finance supports designed to support high growth firms with export potential. This aligns with Council of the European Union Country-Specific Recommendations (CSR) of June 2014, in the context of the European Semester, which

conclude that challenges regarding access to finance remains for SMEs and that activity should be undertaken to address structural bottlenecks related to access to finance for SMEs, and to continue efforts to improve the availability of non-bank financing to SMEs.

The remaining ERDF funds in TO 3 will be directed towards enhancing the competitiveness of micro and small enterprises. SMEs dominate the NI economy in terms of employment and GVA. However the micro and small enterprise base has been disproportionately impacted by the economic downturn. The ERDF Programme is designed to support these businesses to grow and employ more people.

Approximately **14.88% of the ERDF allocation is allocated towards TO 4**, as NI is committed to a significant decrease in its energy demands and reductions in energy poverty.

Whilst the regulatory requirement is for a minimum of 15% to be allocated to Low Carbon activity, this is measured within the overall UK Partnership Agreement. After taking account of the additional allocation for transition regions arising from mid-term review of allocations, the UK department for Business, Energy & Industrial Strategy (BEIS) remains content that sufficient headroom exists within the UK Partnership Agreement to cover this marginal shortfall at UK Transitional Region level.

The Climate Change Act (2008) is part of the UK government's plan to reduce greenhouse gas emissions and commits the government to 34% emission reductions by 2020 based on 1990 levels.

It established the framework to develop a targeted and economically-credible plan to reduce current and future emissions. The act highlights the UK's commitment to urgent international action to tackle climate change

The UK is also signed up to the EU Energy and Climate Framework that commits to reduce GHG emissions by 40% by 2030.

The EU, representing the 28 member states, is committed to meeting this target as part of the global agreement reached in Paris in December 2015 to limit rises in global temperature to 2°C. NI needs to continue to contribute towards the UK and EU climate change targets and implement goal 13 of the UN 2030 sustainable development goals, which requires us to take urgent action to combat climate change and its impacts.

The proportion of the programme allocated to TO4 reflects Northern Ireland's commitment to the reduction of greenhouse gas emissions. Investments in low carbon public transport infrastructure and energy efficiency in public housing represent key components of the NI strategy in meeting these obligations.

Approximately **4% of the ERDF allocation is allocated towards Technical Assistance** because we recognise that appropriate support is required to successfully deliver the ambitious proposals in the ERDF Programme. It is anticipated that just over €96m will be allocated to Financial Instruments and Access to Finance supports. It is important that sufficient resources are made available to ensure that all supports provided under the auspices of the OP are delivered successfully.

In determining the financial ERDF allocation to each of the four Programme PAs, DETI has worked alongside delivery partners to ensure that each individual strand of support has an appropriate allocation, both to ensure the best possible opportunity of achieving objectives and to achieve maximum impact in terms of leverage of private investment. Consideration has also been given to the absorptive capacity of each of the Programme strands.

A determining factor for the ERDF allocation for PA 1 has been the sector-specific focus for support. The S3 Framework has identified 5 key sectors on which to focus PA 1 ERDF funds, and 75% of PA 1 ERDF support will be focused on them. The pool of businesses from this priority list of sectors is naturally smaller than would be the case if sector was not a determinant for selection, and the ERDF allocation to PA 1 has been capped accordingly.

The allocation for PA 2 has largely been determined by the Ex Ante Assessment of Financial Instruments. The assessment clearly demonstrated the need and demand for a suite of Financial Instruments and Access to Finance supports for NI, the quantum of public support required over the Programme period, and the significant potential for leverage of private investment as a result of such support. As such nearly 30% of the total Programme value has been allocated to this specific strand of activity alone.

In addition to assessing a reasonable level of demand for PA 1 & PA 2 supports over the Programme period, and the cost implications of such demand, an appropriate balance has had to be achieved between PA 1 and PA 2 supports. Both PAs have potential to deliver significant levels of private sector investment and both have identified absorptive capacity.

Table 2: Overview of the investment strategy of the operational programme

Priority axis	Fund	Union support (€)	Proportion of total Union support for the operational programme	Thematic objective / Investment priority / Specific objective	Common and programme-specific result indicators for which a target has been set
1	ERDF	113,485,234.00	36.23%	<ul style="list-style-type: none"> ▼ 01 - Strengthening research, technological development and innovation <ul style="list-style-type: none"> ▼ 1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies <ul style="list-style-type: none"> ▼ SO1 - Increase total NI Business Expenditure on Research & Development (NI BERD) ▼ SO2 - To engage more NI businesses in Research and Development. 	[SO1, SO2]
2	ERDF	140,840,469.00	44.96%	<ul style="list-style-type: none"> ▼ 03 - Enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector (for the EAFRD) and the fisheries and aquaculture sector (for the EMFF) <ul style="list-style-type: none"> ▼ 3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes <ul style="list-style-type: none"> ▼ SO3 - To increase the number of High Growth SMEs in Northern Ireland. ▼ SO4 - To increase employment in Northern Ireland micro and small enterprises 	[SO3, SO4]
3	ERDF	46,608,000.00	14.88%	<ul style="list-style-type: none"> ▼ 04 - Supporting the shift towards a low-carbon economy in all sectors <ul style="list-style-type: none"> ▼ 4a - Promoting the production and distribution of energy derived from renewable sources <ul style="list-style-type: none"> ▼ SO5 - Promoting the production and distribution of energy derived from renewable sources ▼ 4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector <ul style="list-style-type: none"> ▼ SO5.2 - Improve energy efficiency rating of social housing stock ▼ 4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures <ul style="list-style-type: none"> ▼ SO5.3 - Journey times on key BRT Corridors into Belfast City Centre 	[SO5.2, SO5.3]
4	ERDF	12,321,185.00	3.93%	SO6 - To effectively and efficiently manage and implement the NI ERDF Programme, and to evaluate its ongoing quality and ultimate success	[]

2. PRIORITY AXES

2.A DESCRIPTION OF THE PRIORITY AXES OTHER THAN TECHNICAL ASSISTANCE

2.A.1 Priority axis

ID of the priority axis	1
Title of the priority axis	Strengthening Research, Technical Development and Innovation

- The entire priority axis will be implemented solely through financial instruments
- The entire priority axis will be implemented solely through financial instruments set up at Union level
- The entire priority axis will be implemented through community-led local development
- For the ESF: The entire priority axis is dedicated to social innovation or to transnational cooperation, or both

2.A.2 Justification for the establishment of a priority axis covering more than one category of region, thematic objective or fund (where applicable)

Not applicable. Priority Axis 1 covers one Fund, one category of region and one thematic objective.

2.A.3 Fund, category of region and calculation basis for Union support

Fund	Category of region	Calculation basis (total eligible expenditure or eligible public expenditure)	Category of region for outermost regions and northern sparsely populated regions (where applicable)
ERDF	Transition	Total	

2.A.4 Investment priority

ID of the investment priority	1b
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ID of the investment priority	1b
Title of the investment priority	Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies

2.A.5 Specific objectives corresponding to the investment priority and expected results

ID of the specific objective	SO1
Title of the specific objective	Increase total NI Business Expenditure on Research & Development (NI BERD)
Results that the Member States seek to achieve with Union support	<p>To help ensure that the UK contributes towards the achievement of the overarching aims of smart, sustainable and inclusive growth, the European Commission in 2012 issued the ‘Position of the Commission services on the development of the Partnership Agreement and programmes in the United Kingdom for the period 2014-20’ paper (the Position paper)[51] to the UK highlighting opportunities for enhancing Member State performance through European Structural and Investment Fund (ESIF) support.</p> <p>In particular, the Position paper emphasises the importance of focusing ESIF support on priority areas including research and innovation and support for SMEs, and suggests that one of the most pressing challenges to be addressed through ESIF support in the UK is stagnant investment in RD&I.</p> <p>At a regional level, the Programme will seek to stimulate the growth of the private sector in NI and to encourage the growth of the enterprises that operate within it, and in so doing to expedite economic growth.</p> <p>With ERDF support, PA 1 will support the provision of a range of Research and Development activities to encourage NI businesses to engage in, and to leverage increased levels of private sector investment in, Research and Development activity.</p>

Investments will only be made in those areas and sectors identified by an ongoing process of entrepreneurial discovery.

A very small percentage of NI businesses are actively engaged in Research and Development activity. PA 1 seeks to achieve increased levels of engagement in Research and Development within NI enterprises, both in terms of increasing activity in businesses already engaged in RD&I and stimulating RD&I in companies who have never undertaken RD&I before.

PA 1 will also support the provision of a Design Service for NI businesses which will complement the range of supports provided, both through the Programme and at a regional level through statutory agencies, with the aim of encouraging NI businesses to harness the benefits that can be derived from design. Support through the Design Service will enable NI businesses to create design management tools and help them respond to new market opportunities and generate new market and product ideas, with the ultimate aim of encouraging economic growth.

The Programme seeks to effect an increase in BERD at a macro-economic level, aiming to contribute to an increase in NI BERD as a % of GVA from a baseline of 1.4% [52] of GVA [53] in 2012 to between 1.7% and 2.0% of GVA in 2020, and ultimately rising to between 1.8% and 2.1% in 2023.

[51] BERD as % of GVA of 1.39% rounded to 1.4%, based on total BERD (2012) of £453m and GVA (2012) of £32,684m.

[52] GVA is commonly used as an estimation of GDP. GVA & taxes - subsidies = GDP.

	[53] Position of the Commission services on the development of the Partnership Agreement and programmes in the United Kingdom for the period 2014-20, November 2012
ID of the specific objective	SO2
Title of the specific objective	To engage more NI businesses in Research and Development.
Results that the Member States seek to achieve with Union support	<p>In a direct response to the EU 2020 target for increased investment in RD&I, the challenges set out in the Commission's 2012 Position paper, and the need for increased Research and Development activity in NI to deliver growth, PA 1 seeks to increase the level of spend on Research and Development activities within NI businesses, critically through greater private sector investment, incentivised by a focused, growth-oriented public sector contribution.</p> <p>A very small percentage of NI businesses are actively engaged in Research and Development activity, and the Programme seeks to achieve increased levels of engagement during the Programme period.</p> <p>PA 1 will help to increase the number of innovation-active enterprises in NI and to stimulate expenditure on R&D within and across NI businesses, and in so doing to embed R&D deeper into the core of NI business activity.</p> <p>NI performance as regards investment in Research and Development activities has improved considerably in recent years, with increases aligning closely with ERDF investments over the same period. It is clear that ERDF has already made a tangible difference to R&D activity in NI, and there is considerable scope to build on this achievement and improve performance even further over the 2014-20 Programme period.</p> <p>Research and Development activity is critical to the promotion of a knowledge-based economy that is capable of supporting and generating high value-added employment, and raising the productivity, competitiveness and growth potential of NI businesses. For example, it is widely recognised that the development of Key Enabling Technologies (KETs) is instrumental in stimulating competitiveness, job creation and growth as they have a broad and multidisciplinary relevance across a range of sectors.</p> <p>With ERDF support, PA 1 will support the provision for a range of Research and Development activities to encourage NI businesses to engage in, and to leverage increased levels of private sector investment in, Research and Development activity.</p>

A very small percentage of NI businesses are actively engaged in Research and Development activity. This Programme seeks to achieve increased levels of engagement in Research and Development within NI enterprises, both in terms of increasing activity in businesses already engaged in RD&I and stimulating RD&I in companies who have never undertaken RD&I before.

PA 1 will also support the provision of a Design Service for NI businesses which will complement the range of supports provided, both through the ERDF Programme and at a regional level through statutory agencies, with the aim of encouraging NI businesses to harness the benefits that can be derived from design. Support through the Design Service will enable NI businesses to create design management tools and help them respond to new market opportunities and generate new market and product ideas, with the ultimate aim of encouraging economic growth.

PA1 seeks to support, at a macroeconomic level, an increase in the number of companies engaged in R&D, from a baseline of 495 in 2012 to 700 by 2023.

Of the 700 companies, it is expected that 200 will engage in R&D activity for the first time as a direct result of PA1 supports.

Table 3: Programme-specific result indicators, by specific objective (for the ERDF and the Cohesion Fund)

Specific objective		SO1 - Increase total NI Business Expenditure on Research & Development (NI BERD)						
ID	Indicator	Measurement unit	Category of region (where relevant)	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
SO1	BERD as a % of GVA	%	Transition	1.40	2012	1.80	Regional Gross Value Added Reports (Office for National Statistics (ONS)) Northern Ireland Research & Development Statistics (Economic and Labour Market Statistics branch, DFP)	Annually

Specific objective		SO2 - To engage more NI businesses in Research and Development.						
ID	Indicator	Measurement unit	Category of region (where relevant)	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
SO2	Companies engaged in R&D	Enterprises	Transition	495.00	2014	700.00	DETI Analytical Services Unit (using annual NI Research and Development Survey Reports)	Annually

2.A.6 Action to be supported under the investment priority (by investment priority)

2.A.6.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
<p>Drawing on the experience gleaned from its management and oversight of previous Programmes, DETI has carefully developed the Programme to ensure that it can be responsive to changes during the Programme period. Whilst the supports offered under PA 1 seek to address the current and anticipated needs of NI businesses seeking to engage in Research and Development, an element of flexibility is crucial in order that the Programme and the supports provided through it can respond to changing economic and environmental conditions and different levels of success amongst the various supports. Adaptable support is crucial in a Programme of activity that could run for a period of up to 10 years. This supports the principle that investment will be made in areas and sectors identified through an ongoing process of entrepreneurial discovery.</p>	
<p>Two main initiatives will be supported under PA 1:</p>	
<ul style="list-style-type: none">• A wide range of grants for Research and Development• Design Service	
<p><u>(i) Grants for Research and Development</u></p>	
<p>A wide range of grants for Research and Development will be supported under PA 1, with the specific aim of encouraging and driving research,</p>	

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
<p>development and innovation activities and supporting Key Enabling Technologies (KETs) within NI businesses.</p> <p>Funding through the Grants for Research and Development Programme will provide businesses and entrepreneurs with grant support to enable them to invest in RD&I in their business operations.</p> <p>Open to all eligible NI businesses, the Grants for Research and Development Programme will offer a broad spectrum of supports through Invest NI as a single point-of-contact, covering the Research and Development continuum from industrial research through to experimental development.</p> <p>The assistance provided through the Grants for Research and Development Programme will also encourage increased business-to-business collaboration and business/academic collaboration, which will provide participating companies with invaluable experience in working with experienced companies and in academic research and development.</p> <p>Activities to be supported will include:</p> <ul style="list-style-type: none"> • scoping, defining and planning an R&D project which has the potential for commercialisation; • research or critical investigation aimed at producing new scientific or technical knowledge with the potential for commercialisation; • product or process development improvements; • exceptional development of leading edge technology i.e. R&D that is strategically important to the industrial or technology sectors; • KETs; • contracted research i.e. support for the deployment of skills/expertise not available in-house; 	

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
<ul style="list-style-type: none"> • linking to a college or university to carry out specific projects with the potential for commercialisation; • prototype development; • co-operation with research institutions; and • product design to stimulate and encourage RD&I activity and entrepreneurship <p><u>(ii) Design Service</u></p> <p>Innovative product design can reduce production costs and improve selling power, and a strong brand identity delivered through effective design can support investment in product and service development by offering differentiation and competitive advantage.</p> <p>Good product design can bring significant benefits to NI businesses. The research and prototype stages of the design process, for example, can generate new product ideas and allow businesses to discover and focus on customer needs and preferences.</p> <p>The Design Service, supported under PA 1, will advocate the use of design as a key tool to support product and service development. It will assist businesses to respond to new market opportunities and generate new product ideas, as well as to create design management tools that are appropriate to their business needs. The Design Service will support both product and process design.</p>	

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
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Businesses will, with support from the Design Service, be able to:

- Turn their ideas into innovative and competitive products and services that are geared towards a specific market;
- Make their processes more efficient; and
- Strengthen their marketing approach.

Advice will range from specific project-related issues to high-level strategic assistance and could encompass many areas including: design management; material selection and testing; branding and graphic design; textile and fashion design; engineering and product design; potential partnership arrangements; supplier linkages; and intellectual property considerations.

The Design Service will provide participant businesses with product and process design support through:

- Promoting greater Design Awareness by demonstrating the strategic importance of design to the NI business community;
- Providing detailed Design Advice on the use of design to improve products and services; and
- Developing the long-term Design Capability of businesses by integrating design and innovation into company management systems and strategies

One-to-one consultations, interactive full and half-day workshop sessions, and networking opportunities will be provided. Professional design consultants will also be brought in to work alongside the businesses, addressing business design and product development needs.

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
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The Design Service will consist of four support areas:

- Design advice clinics held throughout NI and open to all businesses
- Design advice service open to all Invest NI clients
- Expert design support for small-scale and group projects
- Expert design support for larger scale projects

The Design Service will enable participating businesses to create design management tools and to help them respond to new market opportunities and generate new market and product design ideas. It will support NI businesses in harnessing the benefits that can be derived from process design tools, enabling them to address key needs within their businesses and leading to increased efficiency and competitiveness.

Research, Development and Innovation remain at the core of actions required to drive business growth, productivity growth, and economic growth. Design is a key element in this process, and the supports available through the Design Service will complement targeted Grant for Research and Development support also available to NI businesses under PA1.

Contribution towards Priority Axis 1 Objectives

Grants for Research and Development

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
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The specific objectives of PA 1, as indicated previously, are to contribute towards an increase in NI BERD and to engage more NI businesses in Research and Development activity.

NI businesses participating in the PA 1 Grant for Research and Development Programme will match the ERDF grant funding with their own private investment, thus NI BERD will be stimulated with each grant disbursed. Based on previous grant for R&D supports provided by Invest NI to the specific sectors to be targeted through the S3 Framework, a private investment leverage/ERDF investment ratio of 3:1 to 4:1 is anticipated. This has the potential to generate BERD in the range of €325m to €435m as a result of ERDF intervention. This in turn will make an important contribution to the BERD growth required to deliver the PA 1 result sought.

The financial grant assistance that will be made available through the Grant for Research and Development Programme, and the expert advice and guidance that will be made available to participants, will provide a strong incentive for NI businesses to undertake new or additional Research and Development.

The Grant for Research and Development Programme will be complemented by existing support provided by Invest NI's engagement of Sector Specific R&D Advisers (specialists who will work alongside Invest NI's Business Executives and help companies access Invest NI's Research and Development programmes). By offering face to face advice throughout every aspect of the innovation process, from concept to product, the R&D Advisers will help participating companies acquire essential new skills and knowledge. They will encourage companies, especially small companies, to identify projects suitable for Invest NI support.

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
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Design Service

Through working with designers on researching, prototyping and generating new ideas, businesses can develop new products and services that better meet the needs and preferences of their customers. Design helps businesses turn ideas into innovative and competitive products and services that are suitable for the market being targeted. Design can also be used to make business processes more efficient, to improve the working or sales environment, and to develop brand and communication strategies to create more appealing businesses. It is anticipated that the product development and commercialisation elements of the Design Service in particular will contribute to the anticipated increase in NI BERD.

Target Groups for Priority Axis 1

NI is now mid-ranking in terms of R&D performance against other UK regions but remains significantly behind the EU2020 R&D target. Challenges remain to be addressed if Northern Ireland is to improve its performance and be a UK leader – in line with the NIES and draft Innovation Strategy. Not only are too few companies in NI involved in Research and Development, there are too few SMEs involved despite the fact that SMEs account for the significant majority of enterprises in NI.

ERDF funding support will, in the main, be targeted towards micro, small and medium sized enterprises. Large company projects with merit may also be supported if deemed appropriate.

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
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Programme supports under PA 1 will be targeted towards NI companies largely on the basis of their potential for growth and the sectors within which they operate.

Potential for Growth

It is widely recognised that high growth businesses are a key driver for economic growth, so support will be targeted towards those companies that can clearly demonstrate growth potential. Selection criteria are as follows:

- Actual turnover of >£250k (or potential to meet within 3 years) and
- External Sales of >25% or >£250k (or potential to meet within 3 years)

plus either

- Potential employment growth >20% or > 20 jobs within 3 years; or
- Potential external sales growth >20% or >£500k within 3 years; or
- Potential increase in GVA/employee >20% within 3 years

Sector

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
<p>DETI has developed a strong framework within which support will be focused, and believes that supports to be delivered under PA 1 have a sound strategic foundation.</p> <p>The identification of target groups for ERDF support under PA 1 has been greatly informed by the findings of the S3 Framework and through the wider development of innovateNI, NI's Innovation Strategy 2014-25.</p> <p>The S3 Framework in particular has enabled the identification of sectors / opportunities in which NI already has some traction/critical mass and others where latent and emerging potential has been identified.</p> <p>To build on NI's regional priorities and strengths, the Programme will concentrate ERDF grant support on five key growth export-led sectors identified through Smart Specialisation:</p> <ul style="list-style-type: none"> • Stratified Medicine and Connected Health • Advanced Engineering • Electrical and Electronic • Agri-Food Technology • Computer Software and Services 	

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
<p>It is proposed that a minimum of 75% of the allocation for Grants for Research and Development will be focused on the five target sectors identified, with the remaining 25% being made available to support innovative projects from emerging sectors over the lifetime of the programme. For example, there are indications that niche specialisms in the renewable energy sector are emerging. This will ensure that investments over the course of the programme period will be made in areas and sectors identified through an ongoing process of entrepreneurial discovery.</p> <p>Such opportunities will be identified by the MATRIX panel, Invest NI and the DETI Foresight and Horizon Scanning Unit (FHSU). MATRIX works with industry and academia to identify new high technology market opportunities, IP and technologies for NI companies to exploit and academia to benefit from. DETI FHSU has been developed under the auspices of the NIES and supports the work of MATRIX. FHSU will provide ongoing advice and guidance to the DETI as Programme Managing Authority (MA) and other public sector policy developers over the course of the programme, reflecting the views of business and academia.</p> <p>The foresight/horizon scanning approach will create the capacity to plan for the future and to map economic policy needs beyond normal business planning horizons and in so doing will assist in the ongoing effective implementation of the Programme, which will run to 2023.</p> <p>The FHSU will identify key sectors and emerging market opportunities in all areas of the economy and suggest actions to capitalise on them. Advice and guidance from the FHSU will also be supplemented by input from Invest NI, through its direct engagement with business, to identify key emerging sectors.</p> <p>The Programme has been developed so that ERDF support can be provided to discrete projects with merit that can demonstrate significant growth</p>	

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
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potential, in order to capitalise on new opportunities and to maximise the impact of ERDF support.

With regard to the Design Service, clinics are open to all businesses in NI and will not be limited to specific sectors. The clinics will provide participating businesses with advice on specific project-related issues, as well as high-level strategic assistance for design management, service design, branding and graphic design, textile and fashion design, and engineering and product design. Depending on their specific design needs, participating businesses can also receive design assistance from experienced mentors and design professionals.

DETI, as MA, is conscious of the need to ensure that the targets set out for the Programme are challenging but deliverable. The PA 1 targets set in terms of an increase in BERD as a percentage of GVA have been set on the basis of detailed economic analysis with specific reference to Oxford Economic NI GVA Forecasts, and detailed analysis carried out on the current levels of expenditure on R&D and projected increases as a result of ERDF support.

Work has been undertaken by economists working within DETI to determine the results that could realistically be achieved if investment levels for PA 1 supports proceed as envisaged.

In determining the targets, DETI has taken into consideration the views and considerable experience of the bodies likely to be tasked with delivering them.

Analysis indicates that the targets set for PA 1 are challenging but achievable, are focused appropriately, will make a real difference to NI businesses and will make a tangible contribution towards the EU2020 target. The programme targets would not be achievable without ERDF assistance.

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
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2.A.6.2 Guiding principles for selection of operations

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
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Of fundamental importance is the need to support the achievement of Europe 2020 targets. PA 1 will contribute to increasing NI BERD as a percentage of GVA from a baseline of 1.4% to between 1.7% - 2.0% by 2020, and to between 1.8% and 2.1% by 2023. This in turn will contribute to the **EU 2020 target of raising combined public and private investment levels in RD&I to 3% of GDP.**

Operations will be selected taking cognisance of the Commission's 2012 Position paper which highlights areas on which the Commission believes ESI funds should be concentrated.

Programme content will closely align with and contribute to Executive Priorities for NI and, in particular, the NIES's overarching goal to improve the economic competitiveness of the NI economy.

Due regard will be paid to ensure that the operations to be included in the Programme reflect the regulatory requirements which govern the development and implementation of the ERDF Programme. This includes regulatory stipulations regarding the selection and concentration of TOs to be supported.

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
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Specific Guiding Principles for the Selection of Priority Axis 1 Operations

Specific operations under PA 1 will be selected to ensure close alignment and complementarity with the ambitions set out in the Innovation Strategy for Northern Ireland 2014-2025 and the related NI Executive targets.

In line with the S3 Framework, operations will be selected for support on the basis of their potential for growth and the sector within which they operate. Support will be targeted towards NI companies operating within the five key S3 sectors with the greatest opportunities to deliver growth, enhance R&D activity and stimulate private investment.

High growth businesses are a key driver for economic growth and therefore support will be targeted towards companies who can clearly demonstrate growth potential against the following criteria:

- Actual turnover of >£250k (or potential to meet within 3 years) and
- External Sales of >25% or >£250k (or potential to meet within 3 years)

plus either

- Potential employment growth >20% or > 20 jobs within 3 years; or
- Potential external sales growth >20% or >£500k within 3 years; or

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
<ul style="list-style-type: none"> • Potential increase in GVA/employee >20% within 3 years <p>NI businesses operating within the key sectors, and with growth potential who have not yet engaged in R&D activity will also be targeted for support.</p> <p>Operations to be supported will also be identified through a process of entrepreneurial discovery. This will allow an element of flexibility to capitalise on emerging sectors with high growth potential that materialise over the Programme period. This will help to ensure that companies with the greatest potential to contribution to the achievement of PA 1 objectives and results will be targeted for ERDF support.</p> <p>As Intermediate Body, Invest NI will also ensure appropriate environmental practice is applied to the selection of PA 1 operations. Invest NI will ensure that any potential aspects of PA 1 projects which might result in a negative impact on the environment are subject to an environmental impact assessment, with all reasonable endeavours made by the beneficiary to adopt and implement an environmental policy in relation to all aspects of such projects. These requirements will be formal conditions of funding applied to operations in receipt of ERDF support.</p> <p>Operations selected for funding will be required to comply with both the requirements of EU directives and national legislation.</p>	

2.A.6.3 Planned use of financial instruments (where appropriate)

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
Activities planned to support Investment Priority 1 (b) do not include Financial Instruments. However, it is anticipated that the grants for Research and Development to be made available under PA 1 will be complemented by the provision of a suite of Financial Instruments and Access to Finance supports planned to support Investment Priority 3 (d) under PA 2.	

2.A.6.4 Planned use of major projects (where appropriate)

Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
Activities planned to support Investment Priority 1 (b) do not include major projects as defined in Article 100 (Regulation (EU) No 1303/2013).	

2.A.6.5 Output indicators by investment priority and, where appropriate by category of region

Table 5: Common and programme-specific output indicators (by investment priority, broken down by category of region for the ESF, and where relevant, for the ERDF)

Investment priority		1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies							
ID	Indicator	Measurement unit	Fund	Category of region (where relevant)	Target value (2023)			Source of data	Frequency of reporting
					M	W	T		

Investment priority		1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies							
ID	Indicator	Measurement unit	Fund	Category of region (where relevant)	Target value (2023)			Source of data	Frequency of reporting
					M	W	T		
CO01	Productive investment: Number of enterprises receiving support	Enterprises	ERDF	Transition			2,361.00	Invest NI	Annual
CO02	Productive investment: Number of enterprises receiving grants	Enterprises	ERDF	Transition			566.00	Invest NI	Annual
CO04	Productive investment: Number of enterprises receiving non-financial support	Enterprises	ERDF	Transition			2,150.00	Invest NI	Annual
CO26	Research, Innovation: Number of enterprises cooperating with research institutions	Enterprises	ERDF	Transition			68.00	Invest NI	Annual
CO27	Research, Innovation: Private investment matching public support in innovation or R&D projects	EUR	ERDF	Transition			72,530,000.00	Invest NI	Annual
CO28	Research, Innovation: Number of	Enterprises	ERDF	Transition			321.00	Invest NI	Annual

Investment priority		1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies							
ID	Indicator	Measurement unit	Fund	Category of region (where relevant)	Target value (2023)			Source of data	Frequency of reporting
					M	W	T		
	enterprises supported to introduce new to the market products								
CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	Enterprises	ERDF	Transition			343.00	Invest NI	Annual
PO11	Number of Enterprises engaged in R&D for the first time	Enterprises	ERDF	Transition			200.00	Invest NI	Annual

2.A.7 Social innovation, transnational cooperation and contribution to thematic objectives 1-7

Priority axis	1 - Strengthening Research, Technical Development and Innovation

2.A.8 Performance framework

Table 6: Performance framework of the priority axis (by fund and, for the ERDF and ESF, category of region)

Priority axis		1 - Strengthening Research, Technical Development and Innovation											
ID	Indicator type	Indicator or key implementation step	Measurement unit, where appropriate	Fund	Category of region	Milestone for 2018			Final target (2023)			Source of data	Explanation of relevance of indicator, where appropriate
						M	W	T	M	W	T		

Priority axis		1 - Strengthening Research, Technical Development and Innovation											
ID	Indicator type	Indicator or key implementation step	Measurement unit, where appropriate	Fund	Category of region	Milestone for 2018			Final target (2023)			Source of data	Explanation of relevance of indicator,
CO01	O	Productive investment: Number of enterprises receiving support	Enterprises	ERDF	Transition			973			2,361.00	Invest NI	A key indicator for any programme of assistance is a measure of how many entities are being supported. For Priority Axis 1, the focus is on supporting enterprise development through R&D. Measuring the number of enterprises who have been able to access ERDF support is a key indicator of the success of the Programme. As such, this indicator is included within the Performance Framework for Priority Axis 1.
2	F	Expenditure	Euro	ERDF	Transition			61,900,000.00			189,160,000.00	DETI Managing Authority	GfRD supports under PA 1 will provide the stimulus for significant levels of business investment in R&D activity. The financial allocation towards GfRD equates to just under 96% of the total PA 1 allocation. It is appropriate that private investment associated with this activity is monitored and included within the Performance Framework (PF) for PA 1. The target value for expenditure includes all monies associated with the cost of ERDF interventions i.e. ERDF, private and public match.
PO11	O	Number of Enterprises engaged in R&D for the first time	Enterprises	ERDF	Transition			66			200.00	Invest NI	The Programme seeks to catalyse a macro-economic shift in the level of R&D activity being undertaken by businesses in NI, a specific objective being to engage businesses who have not yet undertaken R&D activity. A key indicator of an increased level of R&D activity is the measure of businesses engaging in such activity for the first time. As such, DETI has developed an indicator to measure the number of businesses engaged in R&D for the first time as a direct result of

Priority axis		1 - Strengthening Research, Technical Development and Innovation										
ID	Indicator type	Indicator or key implementation step	Measurement unit, where appropriate	Fund	Category of region	Milestone for 2018			Final target (2023)		Source of data	Explanation of relevance of indicator, ERDF intervention.

Additional qualitative information on the establishment of the performance framework

N/A

2.A.9 Categories of intervention

Categories of intervention corresponding to the content of the priority axis based on a nomenclature adopted by the Commission, and indicative breakdown of Union support.

Tables 7-11: Categories of intervention

Table 7: Dimension 1 - Intervention field

Priority axis		1 - Strengthening Research, Technical Development and Innovation		
Fund	Category of region	Code		€ amount
ERDF	Transition	056. Investment in infrastructure, capacities and equipment in SMEs directly linked to research and innovation activities		76,145,234.00
ERDF	Transition	057. Investment in infrastructure, capacities and equipment in large companies directly linked to research and innovation activities		32,640,000.00
ERDF	Transition	064. Research and innovation processes in SMEs (including voucher schemes, process, design, service and social innovation)		4,700,000.00

Table 8: Dimension 2 - Form of finance

Priority axis		1 - Strengthening Research, Technical Development and Innovation		
Fund	Category of region	Code		€ amount
ERDF	Transition	01. Non-repayable grant		113,485,234.00

Table 9: Dimension 3 - Territory type

Priority axis		1 - Strengthening Research, Technical Development and Innovation	
Fund	Category of region	Code	€ amount
ERDF	Transition	07. Not applicable	113,485,234.00

Table 10: Dimension 4 - Territorial delivery mechanisms

Priority axis		1 - Strengthening Research, Technical Development and Innovation	
Fund	Category of region	Code	€ amount
ERDF	Transition	07. Not applicable	113,485,234.00

Table 11: Dimension 6 - ESF secondary theme (ESF and YEI only)

Priority axis		1 - Strengthening Research, Technical Development and Innovation	
Fund	Category of region	Code	€ amount

2.A.10 Summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries (where appropriate) (by priority axis)

Priority axis:	1 - Strengthening Research, Technical Development and Innovation
<p>Most of the Technical Assistance budget for the Programme will be used to cover Programme-wide administration costs. However, there are a number of activities likely to be supported which would be specific to the activities proposed under PA 1.</p> <p>Experience of similar schemes suggests that the administration and management of the new concentrated Grant for Research & Development Programme will be, by its nature, labour intensive. Significant time is invested in ensuring that beneficiaries are fully informed about the grant offer conditions including the additional requirements involved in administration of ERDF funding.</p> <p>Such support is crucial and accordingly, DETI will put in place additional staff resources dedicated to beneficiary education and support. This will lessen</p>	

the administrative burden on beneficiaries by ensuring that systems and procedures are established at the outset to maintain the information required.

DETI, as MA, will ensure that simplified cost options are employed to reduce the administrative burden. However, even with the use of simplified costs, there will be significant ERDF-specific information requirements which will include capture and reporting of performance data.

Requirements will include, but will not necessarily be limited to:

- Collecting, recording and storing project information and financial data to meet ERDF requirements;
- Producing reports and forecasts as required to facilitate programme monitoring and evaluation;
- Working with Intermediate Body staff and beneficiaries on meeting ERDF compliance through the provision of advice, guidance, training and direct support;
- Desk checking and on-site visits to conduct Level 1 inspections and vouching in accordance with the relevant EC Regulations;
- Conducting follow ups and resolving any issues identified;
- Processing claims and irregularities.

2.A.1 Priority axis

ID of the priority axis	2
Title of the priority axis	Enhancing the Competitiveness of SMEs

- The entire priority axis will be implemented solely through financial instruments
- The entire priority axis will be implemented solely through financial instruments set up at Union level
- The entire priority axis will be implemented through community-led local development
- For the ESF: The entire priority axis is dedicated to social innovation or to transnational cooperation, or both

2.A.2 Justification for the establishment of a priority axis covering more than one category of region, thematic objective or fund (where applicable)

Not applicable. Priority Axis 2 covers one Fund, one category of region and one thematic objective.

2.A.3 Fund, category of region and calculation basis for Union support

Fund	Category of region	Calculation basis (total eligible expenditure or eligible public expenditure)	Category of region for outermost regions and northern sparsely populated regions (where applicable)
ERDF	Transition	Total	

2.A.4 Investment priority

ID of the investment priority	3d
Title of the investment priority	Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes

2.A.5 Specific objectives corresponding to the investment priority and expected results

ID of the specific objective	SO3
Title of the specific objective	To increase the number of High Growth SMEs in Northern Ireland.
Results that the Member States seek to achieve with Union support	<p>The ultimate goal for the Europe 2020 strategy is smart, sustainable and inclusive growth. The focus of this Investment for Growth and Jobs Programme is, as its name suggests, on investment with the aim of stimulating growth and creating jobs.</p> <p>As detailed in Section 1, high growth firms can have a disproportionately positive impact on the economy through a positive long-term contribution to economic competitiveness and structural change in an economy.</p> <p>Historically, NI has been unable to create many ‘high flying’ companies, and the number of high growth companies that have been created has been falling ever since the effects of the economic downturn were felt in the second half of the last decade.</p> <p>This Programme seeks to support an environment in which high growth companies can flourish and continue to grow, enabling NI to capitalise on the economic benefits that high growth companies can bring, both in terms of GVA and job creation.</p> <p>The NI economy is dominated by SMEs - 98.2% of companies are SMEs (and of that 98.2%, 89% are micro enterprises). Difficulties around access to finance are a major constraint to their growth. In fact, 91% of NI SMEs expect it to be difficult to access finance, the highest of any UK region[54].</p> <p>NI has significant market failures with regard to both the supply and demand for finance. The banking sector has been</p>

significantly impacted by the recession and banks have deployed restricted lending practices. The equity market is still very underdeveloped in comparison to other parts of the UK and RoI. The amount of UK BVCA[55] venture capital investment in NI in 2012 was £2m, lower than Wales (£9m) and Scotland (£23m). In addition, the level of angel investment remains lower than other parts of the UK and angel syndicates are less advanced.

There is a demand for finance from NI high growth companies, but there is also a reluctance to move away from traditional bank finance partly due to a lack of knowledge and understanding of the alternatives.

The suite of Access to Finance supports provided under PA 2 will seek to contribute to addressing the market failure identified in the ex-ante assessment by providing a range of investment options to support business growth.

By helping to address the key constraint to business growth through the range of provision proposed, it is expected that the ERDF Programme will contribute to an increase in the number of High Growth SMEs in NI (in the small and medium size range) from a baseline of 695 in 2013 to between 1,300 and 1,500 in 2023.

[54] BIS: SME Journey Towards Raising External Finance October 2013: <http://british-business-bank.co.uk/wp-content/uploads/2013/10/SME-Journey-Towards-Raising-Finance.pdf>

[55] British Venture Capital Association - Private Equity and Venture Capital Report on Investment Activity 2012: http://www.bvca.co.uk/portals/0/library/files/news/2013/RIA_2012.pdf

ID of the specific objective	SO4
Title of the specific objective	To increase employment in Northern Ireland micro and small enterprises
Results that the Member States seek to achieve with Union support	<p>NI has a relatively small private sector and continues to be a small business economy with low levels of business growth.</p> <p>Of regional significance in NI, as referenced in Section 1, is the predominance of small and micro businesses i.e. those with less than 50 employees, which are responsible for more than half of private sector economic activity in the region.</p> <p>Small businesses are a significant economic driver of the NI economy, and support for the growth of these companies is critical to the growth of the NI economy and the jobs that can be created as a result.</p> <p>It is proposed that the actions to be supported under PA 2 will contribute to an increase in employment in NI's micro and small enterprises and increase the number of high growth businesses that are capable of both creating new jobs and increasing their productivity levels relatively quickly.</p> <p>By delivering its objectives, the ERDF programme will support the wide range of economic initiatives designed to rebalance the NI economy by encouraging the growth of the private sector.</p> <p>A central target for SME growth is to increase their employment from 297,000 in 2013 to between 333,000 and 339,000 by 2023 (an increase of at least 36,000 full time equivalent jobs).</p>

Analysis by DETI departmental economists suggests that meeting this target will require employment growth at double the current employment growth forecasts suggest (1.8% annual average) over the period. This will be a challenging target to meet.

The Programme seeks to contribute to job-creating growth. Both objectives for PA 2 tie into this aspiration.

Table 3: Programme-specific result indicators, by specific objective (for the ERDF and the Cohesion Fund)

Specific objective		SO3 - To increase the number of High Growth SMEs in Northern Ireland.						
ID	Indicator	Measurement unit	Category of region (where relevant)	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
SO3	Number of High Growth SMEs in Northern Ireland	Enterprises	Transition	695.00	2013	1,300.00	DETI Analytical Services Unit, based on data from Inter Departmental Business Register (IDBR)	Annual

Specific objective		SO4 - To increase employment in Northern Ireland micro and small enterprises						
ID	Indicator	Measurement unit	Category of region (where relevant)	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
SO4	Employment within micro and small (0-49 employees) Northern Ireland businesses	Full time equivalents	Transition	297,000.00	2013	333,000.00	Departmental Business Register (DBR) Economic and Labour Market Statistics Branch (ELMS); BIS	Annually

2.A.6 Action to be supported under the investment priority (by investment priority)

2.A.6.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
<p>PA 2 will support actions which have the potential to leverage private resources and boost potential high growth sectors, and address the low availability of finance to the private sector (especially SMEs).</p> <p>It will support actions that will help to address ongoing market failures regarding access to finance which stymie business growth in NI, and stimulate growth through investment in NI businesses and entrepreneurs.</p> <p>PA 2 will support a range of Financial Instruments and Access to Finance supports that can leverage private investment and maximise the impact of public funding.</p> <p>Taking cognisance of the Commission’s 2012 Position paper to the UK, and CSRs from the Council of the European Union during the period 2012-2014, and informed by the findings of an extensive Ex Ante Assessment of Financial Instruments for NI, a significant proportion of the ERDF allocation for PA 2 will be directed towards the provision of a suite of Financial Instruments and Access to Finance supports.</p> <p>Access to finance supports could include, for example, repayable forms of assistance including equity funds providing equity finance to new and innovative SMEs in NI aimed at stimulating more private investment in NI companies which demonstrate high growth potential and have innovative and export focused products.</p>	

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
<p>Further detail on the types of Financial Instruments that could be considered for support is set out at Section 2.A.6.3.</p> <p>In addition, PA 2 will encourage growth through business development and entrepreneurship supports that could include, for example:</p> <ul style="list-style-type: none"> • Advice on business growth and exports • Advice on supply chains and distribution • Product Development • Business Planning processes • Improved business efficiency • Marketing and Sales <p>Invest NI will be the Intermediate Body for PA2 interventions. Invest NI will lead on the implementation of the Financial Instruments, Access to Finance supports, and a range of interventions targeted at micro and small enterprises.</p> <p>PA 2 assistance may take the form of financial instruments, repayable forms of assistance and grant support.</p> <p>Invest NI, as Intermediate Body, will work with relevant bodies, including Fund Managers and Local Councils in Northern Ireland, to deliver access to finance, business development and entrepreneurship supports under PA 2.</p>	

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
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Contribution towards Priority Axis 2 Objectives

All Programme supports under PA 2 have been developed with a focus on its two specific objectives, namely to increase the number of high growth companies and to increase employment levels amongst micro and small enterprises.

The range of actions to be supported under PA 2 have been designed to increase the capacity of micro and small enterprises (0-49 employees) to improve their competitiveness, grow, export and create jobs.

Projects brought forward for consideration under PA 2 will be assessed on their potential to make a meaningful contribution to PA 2 objectives, and therefore maximise the impact of ERDF support.

Target Groups for Priority Axis 2

PA 2 will exclusively target Northern Ireland SMEs[56].

As with PA 1, supports under PA 2 will mainly be targeted towards companies who can clearly demonstrate growth potential. A number of the business growth measures to be used are detailed in Section 2 under PA 1 – Potential for Growth. This will help ensure that ERDF support is targeted at companies that have the potential to expand and make a significant positive economic impact. This will include, but will not be limited to, the sectors identified in the S3 Framework.

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
<p>High growth SMEs are a key driver for economic success, and support under PA 2 will be targeted towards those companies who can clearly demonstrate growth potential.</p> <p>PA 2 Financial Instruments and Access to Finance supports will be targeted towards high growth projects that have the greatest potential to generate economic growth and prosperity for NI.</p> <p>In addition, a portion of PA 2 interventions will be targeted towards micro and small enterprises with the potential to grow their businesses and enter new markets.</p> <p>[56] A Northern Ireland SME is one that accords with the EC definition of an SME (2003/361/EC).</p>	

2.A.6.2 Guiding principles for selection of operations

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
<p>As presented under PA 1, of fundamental importance to the selection of Programme operations is the need to support the achievement of the Europe 2020 targets.</p>	

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
<p>Specific operations will be selected taking cognisance of the Commission’s 2012 Position Paper to the UK, and CSRs from the Council of the European Union during the period 2012-2014. which highlight, as a particular area of concern, the low availability of finance to the private sector (especially SMEs).</p> <p>Programme content will also closely align with and contribute to Executive Priorities for NI and, in particular, the NIES’s overarching goal to improve the economic competitiveness of the NI economy.</p> <p>Operations to be included in the Programme will reflect the regulatory requirements that govern the development and implementation of the ERDF Programme. This includes regulatory stipulations in terms of the selection and concentration of TOs to be supported under the Programme.</p> <p>Projects brought forward for consideration under PA 2 will be assessed on their potential to make a meaningful contribution to PA 2 objectives, and therefore maximise the impact of ERDF support.</p> <p>An Ex Ante Assessment of Financial Instruments for NI was undertaken at the start of 2014 to consider market failure and identify a suite of Financial Instruments that could best meet the needs of NI businesses. The findings of the Ex Ante Assessment informed the identification of a number of forms of Financial Instrument and Access to Finance support that could be supported through the ERDF Programme.</p> <p>Operations selected for support will, where appropriate, align with the findings and recommendations of the Ex Ante Assessment.</p> <p>PA 2 Financial Instruments and Access to Finance supports will be targeted towards high growth projects that have the greatest potential to generate</p>	

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
<p>economic growth and prosperity for NI.</p> <p>PA 2 interventions will also be targeted towards micro and small enterprises with the potential to grow their businesses and enter new markets.</p> <p>Specific assessment and selection criteria will be applied to each strand of support. As with all interventions seeking public funding all instruments will be subject to the rigours of the Departmental approvals process, including the NI Guide to Expenditure Appraisal and Evaluation (NIGEAE), to ensure that they can ultimately meet their set objectives, achieve Value for Money and contribute meaningfully to the specific objectives and results set for PA 2.</p> <p>As Intermediate Body, Invest NI will also ensure appropriate environmental practice is applied to the selection of PA 2 operations. Invest NI will ensure that any potential aspects of PA 2 projects which might result in a negative impact on the environment are subject to an environmental impact assessment, with all reasonable endeavours made by the beneficiary to adopt and implement an environmental policy in relation to all aspects of such projects. These requirements will be formal conditions of funding applied to operations in receipt of ERDF support.</p> <p>Operations selected for funding will be required to comply with both the requirements of EU directives and national legislation. Financial Instruments within PA2 will be managed by Fund Managers appointed through open procurement. Only procurement that is compliant with EU and national public procurement rules will be supported with ERDF assistance.</p>	

2.A.6.3 Planned use of financial instruments (where appropriate)

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
Over two thirds of the budget for PA 2 will be focused on the provision of a suite of access to finance supports including a range of Financial Instruments,	

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
<p>which has been determined on the basis of the findings of an extensive Ex Ante Assessment of Financial Instruments for NI. Carried out by an independent body, the Ex Ante Assessment concluded that ERDF funding should support a suite of Financial Instruments to address existing market failures (both on the demand and supply side) that are constraining the growth of NI's SMEs.</p> <p>Tailored to address the market failures which exist for NI companies at each stage in their development, the Financial Instruments supported under PA 2 will provide a mechanism for leveraging increased private sector investment and sharing risks with the private sector. The funds will help build awareness of local companies to access alternative forms of finance (other than bank finance) and also to access the expertise of experienced fund managers. In doing so, they will also build the capacity of the local Venture Capital market.</p> <p>The Financial Instruments supported under PA 2 will complement the other access to finance and business development and entrepreneurship supports provided under PA 2, with the aim of encouraging growth and jobs, and will also complement the RD&I supports available under PA 1. For example, Grant assistance for R&D under PA 1 could enable a company to research and develop a new product line. Access to a Financial Instrument under PA 2 could then enable the same company to bring their product to market by supporting enhanced production, marketing, sales and distribution.</p> <p>The Financial Instruments supported will each address a specific equity or debt capital gap, for example as identified through the Ex Ante Assessment, and through ongoing assessment of prevailing market need and demand, and could include but may not be limited to:</p> <ul style="list-style-type: none"> • University Funds such as equity funds to provide equity finance to potential universities' spin outs. • Seed Funds providing seed and early stage equity finance to SMEs in NI which have high growth potential. • SME Equity Funds • Development Funds to provide expansion-stage capital to SMEs 	

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
<ul style="list-style-type: none"> • Loan Funds, to provide mezzanine finance for example. <p>The suite of funds will support SMEs that have the greatest potential to generate economic growth and prosperity for NI. They will ensure that SMEs at the seed, start-up and expansion stages of the development cycle, focusing on those with high growth potential, have access to financial support through a range of models, providing a continuum of funding for businesses seeking investment.</p> <p>Government policy across Europe is focusing on increasing the competitiveness of SMEs and supporting growth. It is also about leveraging in the experience and funding from the private sector to do so and moving away from grants as a financing tool, instead encouraging businesses to access debt and equity solutions to meet their financing needs.</p> <p>The ERDF allocation for Financial Instruments under PA 2 is reflective of the significant opportunities presented by the instruments to maximise the impact that could be gleaned from ERDF investment.</p> <p>In terms of proportionality, interventions will be supported on the basis of demand for each type of fund, as well as taking into account the appetite of investors, banks and fund managers.</p> <p>Interventions will be proportionate to identified market failure and need quantified in the ex-ante assessment, subject to regular review. Financial Instruments (tend to) be funders of last resort and therefore market distortion will be minimised.</p>	

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
<p>Up to December 2020, the Ex Ante Assessment estimates that the level of public spending required to address market failure is around £114m. Up to December 2023, the estimated level of public funding required is around £154m. However, given competing priorities for ERDF funds, and regulatory requirements in terms of Thematic Concentration, it is unlikely that the funding gap will be able to be met in full.</p> <p>Despite being unable to meet the current funding gap in full, implementing a suite of Financial Instruments with the support of ERDF funding over the period to 2023 should result in the leverage of high levels of private investment, with significant private match contributions envisaged.</p> <p>Article 37 (2) (g) of Regulation (EU) No 1303/2013, requires that the Ex Ante Assessment includes provisions for its revision and update in the case that the Managing Authority considers that the conclusions of the Ex Ante Assessment no longer represent actual market conditions. These provisions will be exercised as appropriate to ensure that the Financial Instruments supported through the Programme, and the mechanism for implementation, are best suited to meeting prevailing market need / demand and the specific objectives of the Programme. This will provide an element of flexibility of support and implementation options in a fluid financial environment.</p>	

2.A.6.4 Planned use of major projects (where appropriate)

Investment priority	3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes
<p>Activities planned under Priority Axis 2 to support Investment Priority 3 (d) do not include major projects as defined in Article 100 (Regulation (EU) 1303/2013).</p>	

2.A.6.5 Output indicators by investment priority and, where appropriate by category of region

Table 5: Common and programme-specific output indicators (by investment priority, broken down by category of region for the ESF, and where relevant, for the ERDF)

Investment priority		3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes							
ID	Indicator	Measurement unit	Fund	Category of region (where relevant)	Target value (2023)			Source of data	Frequency of reporting
					M	W	T		
CO01	Productive investment: Number of enterprises receiving support	Enterprises	ERDF	Transition			710.00	Invest NI	Annual
CO02	Productive investment: Number of enterprises receiving grants	Enterprises	ERDF	Transition			235.00	Invest NI	Annual
CO03	Productive investment: Number of enterprises receiving financial support other than grants	Enterprises	ERDF	Transition			475.00	Invest NI	Annual
CO05	Productive investment: Number of new enterprises supported	Enterprises	ERDF	Transition			102.00	Invest NI	Annual
CO07	Productive investment: Private investment matching public support to enterprises (non-grants)	EUR	ERDF	Transition			62,363,000.00	Invest NI	Annual

Investment priority		3d - Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes							
ID	Indicator	Measurement unit	Fund	Category of region (where relevant)	Target value (2023)			Source of data	Frequency of reporting
					M	W	T		
CO08	Productive investment: Employment increase in supported enterprises	Full time equivalents	ERDF	Transition			2,803.00	Invest NI	Annual

2.A.7 Social innovation, transnational cooperation and contribution to thematic objectives 1-7

Priority axis	2 - Enhancing the Competitiveness of SMEs
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2.A.8 Performance framework

Table 6: Performance framework of the priority axis (by fund and, for the ERDF and ESF, category of region)

Priority axis		2 - Enhancing the Competitiveness of SMEs											
ID	Indicator type	Indicator or key implementation step	Measurement unit, where appropriate	Fund	Category of region	Milestone for 2018			Final target (2023)			Source of data	Explanation of relevance of indicator, where appropriate
						M	W	T	M	W	T		
CO01	O	Productive investment: Number of enterprises receiving support	Enterprises	ERDF	Transition			191			710.00	Invest NI	
2	F	Expenditure	Euro	ERDF	Transition			64,500,000.00			234,733,753.00	Database / Invest NI	

Additional qualitative information on the establishment of the performance framework

N/A

2.A.9 Categories of intervention

Categories of intervention corresponding to the content of the priority axis based on a nomenclature adopted by the Commission, and indicative breakdown of Union support.

Tables 7-11: Categories of intervention

Table 7: Dimension 1 - Intervention field

Priority axis		2 - Enhancing the Competitiveness of SMEs	
Fund	Category of region	Code	€ amount
ERDF	Transition	001. Generic productive investment in small and medium –sized enterprises ('SMEs')	44,515,217.00
ERDF	Transition	067. SME business development, support to entrepreneurship and incubation (including support to spin offs and spin outs)	96,325,252.00

Table 8: Dimension 2 - Form of finance

Priority axis		2 - Enhancing the Competitiveness of SMEs	
Fund	Category of region	Code	€ amount
ERDF	Transition	01. Non-repayable grant	44,515,217.00
ERDF	Transition	03. Support through financial instruments: venture and equity capital or equivalent	49,025,252.00
ERDF	Transition	04. Support through financial instruments: loan or equivalent	47,300,000.00

Table 9: Dimension 3 - Territory type

Priority axis		2 - Enhancing the Competitiveness of SMEs	
Fund	Category of region	Code	€ amount
ERDF	Transition	07. Not applicable	140,840,469.00

Table 10: Dimension 4 - Territorial delivery mechanisms

Priority axis		2 - Enhancing the Competitiveness of SMEs	
Fund	Category of region	Code	€ amount

Priority axis		2 - Enhancing the Competitiveness of SMEs	
Fund	Category of region	Code	€ amount
ERDF	Transition	07. Not applicable	140,840,469.00

Table 11: Dimension 6 - ESF secondary theme (ESF and YEI only)

Priority axis		2 - Enhancing the Competitiveness of SMEs	
Fund	Category of region	Code	€ amount

2.A.10 Summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries (where appropriate) (by priority axis)

Priority axis:	2 - Enhancing the Competitiveness of SMEs
<p>A key component of PA 2 will be the provision of Financial Instruments and access to finance supports.</p> <p>Regulation (EU) No 1303/2013 sets out clear rules on the implementation, management and control of Financial Instruments supported through the 2014-2020 ESIF Programmes. Article 46 requires that MAs provide the Commission with a specific report covering the operations comprising financial instruments as an annex to the Annual Implementation Report. The report will detail progress on the implementation of each of the financial instruments supported under this Programme in some detail. These reports will in turn be used by the Commission to develop summaries for each Member State for subsequent transmission to the European Parliament and the Council and will be made public.</p> <p>Given the complexities of the subject material it may be necessary to call upon Technical Assistance to secure independent experts to objectively assess the Financial Instruments on a regular basis.</p> <p>Financial Instruments represent a complex area in terms of the technical requirements and additional administrative and reporting requirements. As such</p>	

Technical Assistance will be utilised to cover:

- Training costs for relevant staff within any of the Programme Delivery bodies;
- Legal / State Aid guidance; and
- Review of the continued appropriateness of the findings of the Ex Ante Assessment of Financial Instruments carried out to inform the initial development of the Programme, and Re-Assessment if deemed appropriate.

Technical Assistance may also be required, for example, for:

- Staff support for the additional ERDF requirements to include claims processing and data input;
- Economic Appraisal and Assessment;
- Support for delivery of Local Economic Development actions;
- Procurement Advisory Support;
- Awareness Raising Activities to promote Priority 2 supports
- Staff support for Awareness Raising and Promotional Activities

This list is not exhaustive, and the MA may use appropriate Technical Assistance as it deems necessary in support of PA 2 actions.

2.A.1 Priority axis

ID of the priority axis	3
Title of the priority axis	Supporting the Shift Towards a Low Carbon Economy in all Sectors

- The entire priority axis will be implemented solely through financial instruments
- The entire priority axis will be implemented solely through financial instruments set up at Union level
- The entire priority axis will be implemented through community-led local development
- For the ESF: The entire priority axis is dedicated to social innovation or to transnational cooperation, or both

2.A.2 Justification for the establishment of a priority axis covering more than one category of region, thematic objective or fund (where applicable)

Not applicable. Priority Axis 3 covers one Fund, one category of region and one thematic objective.

2.A.3 Fund, category of region and calculation basis for Union support

Fund	Category of region	Calculation basis (total eligible expenditure or eligible public expenditure)	Category of region for outermost regions and northern sparsely populated regions (where applicable)
ERDF	Transition	Total	

2.A.4 Investment priority

ID of the investment priority	4a
Title of the investment priority	Promoting the production and distribution of energy derived from renewable sources

2.A.5 Specific objectives corresponding to the investment priority and expected results

ID of the specific objective	SO5
Title of the specific objective	Promoting the production and distribution of energy derived from renewable sources
Results that the Member States seek to achieve with Union support	This IP was replaced with 4c and 4e. No activity commenced under 4a and therefore there is nothing to be reported against this IP.

Table 3: Programme-specific result indicators, by specific objective (for the ERDF and the Cohesion Fund)

Specific objective		SO5 - Promoting the production and distribution of energy derived from renewable sources						
ID	Indicator	Measurement unit	Category of region (where relevant)	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting

2.A.6 Action to be supported under the investment priority (by investment priority)

2.A.6.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries

Investment priority	4a - Promoting the production and distribution of energy derived from renewable sources

2.A.6.2 Guiding principles for selection of operations

Investment priority	4a - Promoting the production and distribution of energy derived from renewable sources

2.A.6.3 Planned use of financial instruments (where appropriate)

Investment priority	4a - Promoting the production and distribution of energy derived from renewable sources

2.A.6.4 Planned use of major projects (where appropriate)

Investment priority	4a - Promoting the production and distribution of energy derived from renewable sources

2.A.6.5 Output indicators by investment priority and, where appropriate by category of region

Table 5: Common and programme-specific output indicators (by investment priority, broken down by category of region for the ESF, and where relevant, for the ERDF)

Investment priority		4a - Promoting the production and distribution of energy derived from renewable sources							
ID	Indicator	Measurement unit	Fund	Category of region (where relevant)	Target value (2023)			Source of data	Frequency of reporting
					M	W	T		

2.A.4 Investment priority

ID of the investment priority	4c
Title of the investment priority	Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector

2.A.5 Specific objectives corresponding to the investment priority and expected results

ID of the specific objective	SO5.2
Title of the specific objective	Improve energy efficiency rating of social housing stock
Results that the Member States seek to achieve with Union support	<p>More than 42% of people in Northern Ireland live in fuel poverty, a figure more likely to rise than fall. In the social housing sector this figure rises to 50%</p> <p>People cannot afford to heat their homes adequately.</p> <p>Through supporting efforts in relation to fuel poverty, a targeted programme of improving insulation in properties identified via SCS as having a poor SAP rating will see 50% of the social housing stock have an increased SAP rating from 54 to 69.</p>

	<p>A comparison of the post work SAP rating of the properties included in the programme will be used to calculate revised Combined Fuel Poverty Score for households.</p>
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Table 3: Programme-specific result indicators, by specific objective (for the ERDF and the Cohesion Fund)

Specific objective		SO5.2 - Improve energy efficiency rating of social housing stock						
ID	Indicator	Measurement unit	Category of region (where relevant)	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
SO5.2	Energy efficiency rating of social housing stock	SAP Ratings	Transition	54.00	2015	69.00	Energy Performance Certificates - NI Domestic Energy Performance Certificate Register	Annual

2.A.6 Action to be supported under the investment priority (by investment priority)

2.A.6.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries

Investment priority	4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector
<p>The NI Tower Block housing stock comprises 32 blocks with 1,912 individual properties. Over cladding of 10 Tower blocks will generate CO2 savings in excess of 1,000 tonnes per annum. As well as enhancing the thermal performance of the blocks, the over cladding will reduce heating costs for tenants and help address fuel poverty.</p> <p>Other properties to be targeted include 2-storey social housing building built between 1950 and 1979 using proprietary concrete systems. Half of these are deemed to fail the thermal comfort criteria. Over-cladding of these dwellings would significantly improve energy efficiency. Each lot of 500 houses is estimated to deliver CO2 savings of 800 tonnes per annum.</p> <p>The overcladding activity will be accompanied by the installation of high performance double glazed windows and doors, and better insulated roofs to provide a ‘Deep’ retrofit. In tower blocks and two storey buildings inefficient heating systems will be upgraded. In the two storey homes, boilers of over 90% efficiency will be installed with advanced controls to meet the smaller reduced heating demands. In addition to the savings achieved by insulation, the new heating installations provide further energy and Co2 savings of ca 18%, and up to 40% CO2 savings when changing from heating oil to gas.</p> <p>As well as making this social housing more energy efficient there will be important co-benefits in terms of job creation, health and comfort, competitiveness, energy security and reducing fuel poverty in social housing from its current level of 50%.</p>	

Investment priority	4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector
<p>The Stock Condition Survey undertaken by Savills as part of the NI Housing Executive (NIHE)/ Department for Social Development (DSD) Joint Asset Commission in 2014/15 included an assessment of energy performance of the properties as measured by the Standard Assessment Procedure (SAP). This concluded that the SAP ratings for tower blocks and non-traditional are lower than the overall average for the NIHE stock as a whole which is just over 57. The average SAP rating of the tower blocks is 52.69. A comparative SAP2012 value for non-traditional stock “No-Fines”, based on wall insulation, can be 8 SAP points lower than for the brick or block homes with cavity wall insulation that are the majority of NIHE stock.</p> <p>Provision of these works will reduce residents’ use of their heating systems resulting in a corresponding reduction in energy use and CO2 emissions. This will be measured by taking the SAP ratings for the accommodation before and after the works and translating the post-works increase in the SAP scores into savings in emissions.</p> <p>“SAP” rating stands for Standard Assessment Procedure and is the governments recommended system for producing a home energy rating as part of the national standard for calculating the energy performance of buildings. It provides a simple means of reliably estimating the energy efficiency performance of a building home.</p> <p>SAP ratings are expressed on a scale of 1 to 100 - the higher the number, the better the rating. The ratings are based on a scale of A to G as follows:</p> <p>A: 92-100 SAP point (most efficient)</p> <p>B: 81-91 SAP points</p> <p>C: 69-80 SAP points</p> <p>D: 55-68 SAP points</p> <p>E: 39-54 SAP points</p>	

Investment priority	4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector
<p>F: 21-38 SAP points</p> <p>G: 1-20 SAP points (least efficient)</p> <p>SAP is calculated by a procedure which is specified in Building Regulations, and which predicts heating and hot water costs. These costs depend on the insulation and air tightness of the house, and on the efficiency and control of the heating system. The calculation uses the Building Research Establishment's Domestic Energy Model (BREDEM).”</p> <p>Two different types of cladding are used by NIHE and both have been rigorously tested and are fully compliant with building control and fire safety regulations with all appropriate fire breaks in place. The NIHE has met with the manufacturers of the cladding systems used on their tower blocks and are assured that both systems are fully compliant when fire tested to British Standards BR135 and BS 8414 by the British Research Establishment (BRE).</p>	

2.A.6.2 Guiding principles for selection of operations

Investment priority	4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector
<p>In preparing this Programme, the following guiding principles will be taken into account in consideration of the fundamental need for NI to play its part in supporting the achievement of the Europe 2020 targets of smart, sustainable and inclusive growth.</p> <p>Operations will be selected taking cognisance of the Commission’s 2012 Position paper to the UK which highlights areas where ESIF support should be concentrated. In particular, the paper notes ‘facilitating the supply and use of renewable energy sources’. This directly links to the interventions proposed through the Grid Strengthening Project.</p> <p>Programme content will closely align with and contribute to the NI Executive’s priorities, the NIES’s overarching goal to improve the economic competitiveness of the economy and, in particular, the Northern Ireland Greenhouse Gas Emissions Reduction Action Plan.</p> <p>Due regard will be paid to ensure that the operations to be included in the Programme reflect the regulatory requirements which govern the development</p>	

Investment priority	4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector
<p>and implementation of the ERDF Programme.</p> <p>The selection of operations within PA 3 will be guided by the need to support the NI Executive’s target of a reduction in GHG emissions by 35% on 1990 levels by 2025. This in turn will contribute to the EU 2020 target of a 20% cut in greenhouse gas emissions (from 1990 levels).</p> <p>As Intermediate Body, DfC and DfI will also ensure appropriate environmental practice is applied to the selection of PA 3 operations. DfE as managing authority will ensure that any potential aspects of PA 3 operations which might result in a negative impact on the environment are subject to an environmental impact assessment, with all reasonable endeavours made by the beneficiary to adopt and implement an environmental policy in relation to all aspects of such projects. These requirements will be formal conditions of funding applied to operations in receipt of ERDF support.</p> <p>Where relevant, actions will follow the objectives within the European Commission’s Strategic Energy Technology Plan[61].</p> <p>PA 3 objectives and target values will be regularly reviewed for reasonableness to ensure that they remain challenging and appropriate, and continue to reflect NI Energy Strategy and Policy.</p> <p>As highlighted in the UK Low Carbon Transition Plan, the Northern Ireland Executive has envisaged a number of integrated investments to increase usage of public transport and increase multimodal urban mobility.</p> <p>Relevant State Aid regulations and guidance will be followed.</p> <p>Investments should lead to a significant reduction of CO2 emissions compared to the existing installation (in case of fuel switching at least 30%).</p> <p>Investments in this sector have a lifetime of decades and therefore should align to relevant EU law provisions and policies. The heating systems financially supported by the OP should from the outset of the programming period comply with the minimum energy efficiency and emissions requirements applicable at the end of the year 2020 as defined by implementing measures under the Ecodesign Directive 2009/125/EC.</p> <p>Investments should be socio economically sustainable and address energy poverty.</p> <p>Projects using renewable energy should be prioritised.</p>	

Investment priority	4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector
Investments should be conditional on improving energy efficiency and reducing energy demand in the buildings served by the installations.	
All investments have to be in line with EU environmental standards and legislation.	
[61] UK National Energy Efficiency Action Plan	

2.A.6.3 Planned use of financial instruments (where appropriate)

Investment priority	4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector
Activities planned under Priority Axis 3 to support Investment Priorities 4(c) and 4(e) do not include financial instruments.	

2.A.6.4 Planned use of major projects (where appropriate)

Investment priority	4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector
Activities planned to support Investment Priority 4 (c) & 4 (e) do not include major projects as defined in Article 100 (Regulation (EU) No 1303/2013).	

2.A.6.5 Output indicators by investment priority and, where appropriate by category of region

Table 5: Common and programme-specific output indicators (by investment priority, broken down by category of region for the ESF, and where relevant, for the ERDF)

Investment priority		4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector							
ID	Indicator	Measurement unit	Fund	Category of region (where relevant)	Target value (2023)			Source of data	Frequency of reporting
					M	W	T		
CO31	Energy efficiency: Number of households with improved energy consumption classification	Households	ERDF	Transition			2,488.00	NI Housing Executive energy performance certificates	Annual
CO32	Energy efficiency: Decrease of annual primary energy consumption of public buildings	kWh/year	ERDF	Transition			112,865.00	EPC certificates	Annual
CO34	GHG reduction: Estimated annual decrease of GHG	Tonnes of CO2eq	ERDF	Transition			4,064.00	SAP Ratings	Annual

2.A.4 Investment priority

ID of the investment priority	4c
Title of the investment priority	Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures

2.A.5 Specific objectives corresponding to the investment priority and expected results

ID of the specific objective	SO5.3
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Title of the specific objective	Journey times on key BRT Corridors into Belfast City Centre
Results that the Member States seek to achieve with Union support	<p>The use of low carbon hybrid technology for BRT vehicles is forecast to deliver fuel and carbon reductions of between 15 and 30% compared to diesel vehicles of the same size.</p> <p>The hybrid technology to be used in the BRT vehicles will be very similar to that used in the New Bus for London. Transport for London claim that they are achieving carbon reductions of up to 40% with this new technology.</p> <p>The wider BRT project will only be successful through delivery and implementation of all its component parts. Without constructing the replacement depot and implementing the smart ticketing systems, the impact of BRT on congestion within Belfast would be significantly diminished. None of the component elements of BRT will deliver tangible results in their own right, with the overall results flowing from BRT being greater than the sum of the parts. Therefore, whilst this Operation Programme will only part fund a contribution to BRT in its wider guise, successful implementation of BRT and the results that flow from it are entirely dependent upon this vital European Union support.</p> <p>Planned activity is expected to deliver the following:</p> <ul style="list-style-type: none"> • Carbon savings of 92,000 tonnes over the appraisal period are forecasted, valued at almost £3 million. • Increase in public transport usage by 3.5 million trips per year within 15 years of the BRT pilot network becoming operational; • Increase daily public transport patronage by between 43% and 75% depending on the corridor; • Increase public transport’s modal share by approximately eight percentage points, from Do-Minimum scenario of 17% to 25% in the Do-Something scenario along the BRT corridors; and • Reduce public transport journey times along the corridors by up to 30%. <p>It is expected that this intervention will lead to a reduction in traffic volumes on the WWAY and EWAY corridors by up to 25% during peak periods - in part due to modal shift from the private car and also dispersion to other routes.</p>

General traffic journey times along, and in the vicinity of, the corridors are anticipated to increase by an average of 5-8% - although some sections will experience increases of 40%, particularly in the immediate period after implementation.

The replacement depot and smart ticketing solution are complimentary activities to the wider BRT project. Inclusion within the programme will contribute significantly to the

Northern Ireland PfG target of reductions in GHG emissions by 35% on 1990 levels by 2025.

Table 3: Programme-specific result indicators, by specific objective (for the ERDF and the Cohesion Fund)

Specific objective		SO5.3 - Journey times on key BRT Corridors into Belfast City Centre						
ID	Indicator	Measurement unit	Category of region (where relevant)	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
SO5.3	Journey times on key BRT corridors into Belfast City Centre	Minutes	Transition	36.00	2014	27.00	Department for Infrastructure Bustrak system	Annual

2.A.6 Action to be supported under the investment priority (by investment priority)

2.A.6.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries

Investment priority	4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures
<p>The overall vision is to develop a rapid transit system for Belfast which will contribute to the realisation of the vision for public transport, namely to:</p> <ul style="list-style-type: none"> • Encourage modal shift away from non-essential car use by providing a safe, economic and reliable alternative; • Encourage the greater use of public transport in support of the Government’s economic, social and sustainability objectives; • Support economic growth and provides high quality access to and between new land use developments in the city; <p>ERDF investment in the ticketing system and depot will complement other ongoing activities that include purchase of low carbon emission vehicles and realignment of carriage ways and traffic signalling. Whilst each element is capable of being delivered separately, the holistic investment in BRT will deliver a transformative impact on public transport provision in Belfast, and deliver significant savings both in journey times and carbon emissions. The integrated ticketing system will reduce journey times and encourage increased use of public transport and the upgraded bus fleet will operate and be maintained from a new, bespoke energy efficient depot capable of housing the larger low carbon vehicles.</p> <p>BRT aims to deliver the ambitious targets in terms of reduced journey times, increased use of public transport and reduced carbon emissions and in this respect the investment from the ERDF Growth & Job Operational Programme is critical.</p> <p>The problem of Belfast inner city congestion will require the adoption of a comprehensive, holistic approach. No one component solution or initiative will eradicate the current heavy reliance on the private car. But by improving the attractiveness of public transport, in terms of comfort, speed, reliability and efficiency, BRT will have a significant influential effect. The application of Union support towards the replacement depot and Smart ticketing solution should not be underestimated in terms of influencing a modal shift to public transport usage.</p> <p>The BRT system will provide fast and reliable services connecting East and West Belfast, Titanic Quarter and key locations of economic, welfare and social activity in the city centre and the corridors served by the system. Cross-city services will operate via the city centre and integrate with existing</p>	

Investment priority	4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures
<p>public transport services to deliver a multi-modal urban transport system which maximises the opportunities for interchange.</p> <p>BRT vehicles will provide a substantive increase in passenger capacity (100 passengers) and utilise low carbon hybrid technologies which will deliver better services for passengers while cutting carbon emissions and delivering economic growth. Public transport in Northern Ireland is delivered by Translink and this will be the first time low carbon hybrid technologies will be utilised by the enterprise.</p> <p>Integrating public transport, increasing its accessibility and likely use as a viable alternative for commuting (e.g. park and ride facilities, transport hubs, connecting bus and rail, cycle links, etc.) will increase public transport passenger numbers and alleviate urban congestion.</p> <p>Ticketing System - Implementation of the BRT Ticketing System Platform will include the purchase and installation of 125 Ticket Vending Machines across BRT routes with integrated smartcard readers and with integrated but separate PED (Pin Entry Device) for EMV (Europay, Mastercard & Visa) payments, capable of issuing the current range of Metro paper tickets and topping up and validating existing smartcard range, accepting contactless EMV payment cards, accepting coins and notes and giving change. In addition, it will deliver:</p> <ul style="list-style-type: none"> • 125 Platform Validators in capable of validating the existing commercial and concessionary smartcard range; • 35 Inspectors Handheld ticket machines capable of issuing current range of Metro paper tickets, checking/validating existing commercial and concessionary smartcard range and issuing penalty fares. For Feeder Services, 20 on-bus ticket machines capable of issuing current range of Metro paper tickets, validating existing commercial and concessionary smartcard range and accepting contactless EMV payment cards; and • Installation of shelters to accommodate the Smart Ticketing hardware and real time information displays. <p>Implementation of a new ticketing solution for BRT will enhance the overall efficiency of the transport sector and associated transport operations; in doing so this will contribute to a reduction in traffic congestion in urban areas; and a general decarbonisation of the public transport network. This is wholly consistent with ensuring sustainable and efficient transport systems, preparing for expected future transport flows and enabling all modes of transport to be decarbonised.</p> <p>The use of the Smart Ticketing Scheme will be monitored by tracking the number of journeys undertaking using the new scheme on an annual basis throughout the lifetime of the programme.</p> <p>Depot - The existing Public Service Vehicle (PSV) depot is not suitable for operating a modern and improved transport system and the current location is</p>	

Investment priority	4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures
<p>not suitable as it is unable to accommodate the technological requirements for the hybrid vehicles to be used on the BRT routes.</p> <p>There are also a number of economic and efficiency issues including poor thermal performance; energy inefficiency – lighting and heating; asbestos construction materials; poor condition of building fabric and degradation of roof-light fabric. A suitable depot cannot be developed on the current site.</p> <p>A new brown field site within the Belfast Harbour Estate has been identified on which a new bespoke depot can be developed. This presents the opportunity to develop a depot providing the necessary technological requirements and applying the most up to date energy efficient technologies.</p> <p>To that end the depot will be developed toward the achievement of BREEAM excellence standard and will incorporate a number of environmentally innovative and energy efficient technologies including; Photo Voltaic System; Solar Hot Water; Rain Water Harvesting; Enhanced Thermal Envelope; LED Lighting; Maximisation of Natural Light; Natural Ventilation; and Building Energy Management System.</p> <p>Translink NI will be the owner of the depot. Translink is a wholly publically owned body funded by the NI Department for Infrastructure (DfI) and is the primary provider of public transport services in Northern Ireland. Translink is uniquely placed to encourage the use of public transport as the preferred method of transport thus contributing to reduced road transport emissions.</p>	

2.A.6.2 Guiding principles for selection of operations

Investment priority	4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures
<p>In preparing this Programme, the following guiding principles will be taken into account in consideration of the fundamental need for NI to play its part in supporting the achievement of the Europe 2020 targets of smart, sustainable and inclusive growth.</p> <p>Operations will be selected taking cognisance of the Commission’s 2012 Position paper to the UK which highlights areas where ESIF support should be concentrated. In particular, the paper notes ‘facilitating the supply and use of renewable energy sources’. This directly links to the interventions proposed through the Grid Strengthening Project.</p> <p>Programme content will closely align with and contribute to the NI Executive’s priorities, the NIES’s overarching goal to improve the economic</p>	

Investment priority	4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures
<p>competitiveness of the economy and, in particular, the Northern Ireland Greenhouse Gas Emissions Reduction Action Plan.</p> <p>Due regard will be paid to ensure that the operations to be included in the Programme reflect the regulatory requirements which govern the development and implementation of the ERDF Programme.</p> <p>The selection of operations within PA 3 will be guided by the need to support the NI Executive’s target of a reduction in GHG emissions by 35% on 1990 levels by 2025. This in turn will contribute to the EU 2020 target of a 20% cut in greenhouse gas emissions (from 1990 levels).</p> <p>As Intermediate Body, DfC and DfI will also ensure appropriate environmental practice is applied to the selection of PA 3 operations. DfE as managing authority will ensure that any potential aspects of PA 3 operations which might result in a negative impact on the environment are subject to an environmental impact assessment, with all reasonable endeavours made by the beneficiary to adopt and implement an environmental policy in relation to all aspects of such projects. These requirements will be formal conditions of funding applied to operations in receipt of ERDF support.</p> <p>Where relevant, actions will follow the objectives within the European Commission’s Strategic Energy Technology Plan[61].</p> <p>PA 3 objectives and target values will be regularly reviewed for reasonableness to ensure that they remain challenging and appropriate, and continue to reflect NI Energy Strategy and Policy.</p> <p>As highlighted in the UK Low Carbon Transition Plan, the Northern Ireland Executive has envisaged a number of integrated investments to increase usage of public transport and increase multimodal urban mobility.</p> <p>Relevant State Aid regulations and guidance will be followed.</p> <p>Investments should lead to a significant reduction of CO2 emissions compared to the existing installation (in case of fuel switching at least 30%).</p> <p>Investments in this sector have a lifetime of decades and therefore should align to relevant EU law provisions and policies. The heating systems financially supported by the OP should from the outset of the programming period comply with the minimum energy efficiency and emissions requirements applicable at the end of the year 2020 as defined by implementing measures under the Ecodesign Directive 2009/125/EC.</p>	

Investment priority	4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures
<p>Investments should be socio economically sustainable and address energy poverty.</p> <p>Projects using renewable energy should be prioritised.</p> <p>Investments should be conditional on improving energy efficiency and reducing energy demand in the buildings served by the installations.</p> <p>All investments have to be in line with EU environmental standards and legislation.</p> <p>[61] UK National Energy Efficiency Action Plan</p>	

2.A.6.3 Planned use of financial instruments (where appropriate)

Investment priority	4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures
<p>Activities planned under Priority Axis 3 to support Investment Priorities 4(c) and 4(e) do not include financial instruments.</p>	

2.A.6.4 Planned use of major projects (where appropriate)

Investment priority	4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures
<p>Activities planned to support Investment Priority 4 (c) & 4 (e) do not include major projects as defined in Article 100 (Regulation (EU) No 1303/2013).</p>	

2.A.6.5 Output indicators by investment priority and, where appropriate by category of region

Table 5: Common and programme-specific output indicators (by investment priority, broken down by category of region for the ESF, and where relevant, for the ERDF)

Investment priority		4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures							
ID	Indicator	Measurement unit	Fund	Category of region (where relevant)	Target value (2023)			Source of data	Frequency of reporting
					M	W	T		
CO34	GHG reduction: Estimated annual decrease of GHG	Tonnes of CO2eq	ERDF	Transition			147.00	EPC certificates	Annual

2.A.7 Social innovation, transnational cooperation and contribution to thematic objectives 1-7

Priority axis	3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors
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2.A.8 Performance framework

Table 6: Performance framework of the priority axis (by fund and, for the ERDF and ESF, category of region)

Priority axis		3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors											
ID	Indicator type	Indicator or key implementation step	Measurement unit, where appropriate	Fund	Category of region	Milestone for 2018			Final target (2023)			Source of data	Explanation of relevance of indicator, where appropriate
						M	W	T	M	W	T		
CO34	O	GHG reduction: Estimated annual decrease of GHG	Tonnes of CO2eq	ERDF	Transition						4,211.00	EPC Certificates/SAP Ratings	
2	F	Expenditure	Euro	ERDF	Transition			32,967,000			77,680,000.00	ESIF Database	
KIS02	I	Completion of construction of the Depot	Phase	ERDF	Transition			Physical completion of the depot to be completed			1.00	Department for Infrastructure	Depot construction due for completion by end 2018, will be fully operational by 2023

Additional qualitative information on the establishment of the performance framework

N/A

2.A.9 Categories of intervention

Categories of intervention corresponding to the content of the priority axis based on a nomenclature adopted by the Commission, and indicative breakdown of Union support.

Tables 7-11: Categories of intervention

Table 7: Dimension 1 - Intervention field

Priority axis	3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors		
Fund	Category of region	Code	€ amount
ERDF	Transition	014. Energy efficiency renovation of existing housing stock, demonstration projects and supporting measures	23,159,094.00
ERDF	Transition	043. Clean urban transport infrastructure and promotion (including equipment and rolling stock)	23,448,906.00

Table 8: Dimension 2 - Form of finance

Priority axis	3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors		
Fund	Category of region	Code	€ amount
ERDF	Transition	01. Non-repayable grant	46,608,000.00

Table 9: Dimension 3 - Territory type

Priority axis	3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors		
Fund	Category of region	Code	€ amount
ERDF	Transition	07. Not applicable	46,608,000.00

Table 10: Dimension 4 - Territorial delivery mechanisms

Priority axis		3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors	
Fund	Category of region	Code	€ amount
ERDF	Transition	07. Not applicable	46,608,000.00

Table 11: Dimension 6 - ESF secondary theme (ESF and YEI only)

Priority axis		3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors	
Fund	Category of region	Code	€ amount

2.A.10 Summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries (where appropriate) (by priority axis)

Priority axis:	3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors
<p>Most of the Technical Assistance budget for the Programme will be used to cover Programme-wide administration costs, with planned programme activities requiring appropriate support to successfully deliver the ambitious proposals in the ERDF Programme.</p> <p>With funding in excess of €46m allocated to delivery of low carbon project activity under PA3, it is essential that sufficient resources are available to ensure that the supports provided are sufficiently underpinned.</p> <p>TA support for the key investments under PA3 projects could include, but not be limited to:</p> <ul style="list-style-type: none"> • Staff costs; • Technical expertise to oversee development, application and delivery; 	

- Evaluation;
- Procurement support

2.B DESCRIPTION OF THE PRIORITY AXES FOR TECHNICAL ASSISTANCE

2.B.1 Priority axis

ID of the priority axis	4
Title of the priority axis	Technical Assistance

2.B.2 Justification for establishing a priority axis covering more than one category of region (where applicable)

Not applicable. Northern Ireland is, in its entirety, a transition region and therefore Priority Axis 4 covers only one category of region.

2.B.3 Fund and category of region

Fund	Category of region	Calculation basis (total eligible expenditure or eligible public expenditure)
ERDF	Transition	Total

2.B.4 Specific objectives and expected results

ID	Specific objective	Results that the Member States seek to achieve with Union support
SO6	To effectively and efficiently manage and implement the NI ERDF Programme, and to evaluate its ongoing quality and ultimate success	Not required. The description of the expected results is required only where the Union support to the priority axis or axes for Technical Assistance in an Operational Programme exceeds €15m. The Technical Assistance (TA) allocation for the ERDF Investment for Growth and Jobs Programme for Northern Ireland is €12.321m. The TA budget has been determined on the basis of experience gained by DETI in managing and implementing the 2007-13 ERDF Programme and also an analysis of the support required to efficiently and effectively implement the 2014-20 Programme.

2.B.5 Result indicators

Table 12: Programme-specific result indicators (by specific objective) (for ERDF/ESF/Cohesion Fund)

Priority axis		SO6 - To effectively and efficiently manage and implement the NI ERDF Programme, and to evaluate its ongoing quality and ultimate success									
ID	Indicator	Measurement unit	Baseline value			Baseline year	Target value (2023)			Source of data	Frequency of reporting
			M	W	T		M	W	T		

2.B.6 Actions to be supported and their expected contribution to the specific objectives (by priority axis)

2.B.6.1 A description of actions to be supported and their expected contribution to the specific objectives

Priority axis	4 - Technical Assistance
Reference: points (c) (i) and (iii) of the first subparagraph of Article 96 (2) CPR	
<p>Priority Axis 4</p> <p>‘The public expects MAs to fulfil two essential tasks when running a Programme: to deliver it in an efficient manner and to assess whether it has produced the desired effects’.[62]</p> <p>Efficient and effective Programme management (including sound evaluation) will be critical to the successful delivery of the Programme, and is therefore the specific objective of PA 4.</p> <p>Strong administrative arrangements and Programme design lead to effective delivery. PA 4 will complement the other PAs by ensuring that administrative</p>	

Priority axis	4 - Technical Assistance
<p>arrangements are strong, supporting the effective management of the Programme from preparation through to evaluation.</p> <p>To meet its objective, PA 4 will support actions for Programme preparation, management, monitoring, evaluation, information and communication, control and audit.</p> <p>DETI has drawn on its experience as MA for the 2007-13 Programme to assess each aspect of Programme management to identify how best to manage the 2014-20 Programme. A Mid-Term Evaluation (MTE) of the 2007-13 Programme[63] was carried out in 2011 and its findings considered in the development of PA4.</p> <p>PA4 will be utilised to ensure compliance with regulatory requirements governing the ERDF funds including fulfilling all regulatory obligations regarding the functions of the MA, Certifying Authority and Audit Authority (AA) as per Articles 125-127 of Regulation (EU) No 1303/2013 such as putting in place effective and proportionate anti-fraud measures, and the responsibilities of the MA as regards Information and Communication as per Articles 115 – 117 of Regulation (EU) No 1303/2013.</p> <p>Administrative arrangements in the UK are generally sound[64], and efforts should continue to fine-tune them and to reduce the administrative burden on beneficiaries to ensure effective access to interventions. Evaluation activity should be developed, and monitoring and evaluation aligned, with the new Regulatory Framework in terms of co-ordination, e-cohesion, and partnership.</p> <p>PA 4 will ensure continued sound administrative arrangements to support effective Programme delivery, to implement changes in procedure that will reduce administrative burden on beneficiaries, and to ensure that effective monitoring and evaluation measures are designed, planned and implemented.</p>	

An indicative list of activities to be supported follows, drawing on experience gained in the implementation of the 2007-13 Programme.

(a) Monitoring and Evaluation

Support to monitoring and evaluation activity undertaken in Programme/project preparation, implementation and ex-post analysis.

(b) Information, Communication, Awareness Raising & Publicity

The MTE recommended that opportunities should be taken to maximise communication activities to promote schemes and the Programme as a whole. A variety of actions will be undertaken to appropriately promote the role of ERDF funding in supported projects and to ensure that publicity requirements are met.

(c) Procurement Advisory supports including advice on both national and EU Procurement Requirements, and support throughout the Procurement process

(d) Recruitment & Selection of Projects, including Economic & Technical Appraisal

(e) Monitoring Committee & other management oversight activities

(f) Advice, Guidance & Training Supports for those involved in ERDF administration

Management of EU funding requires in-depth understanding of Regulations and guidance. During the 2007-13 Programme, training was provided on a wide range of topics, such as irregularities and audit, to address non-compliance issues and minimise risk of irregularities. This training proved invaluable. PA 4 will support training in all aspects of Programme Management and delivery.

(g) Programme Database Development & Maintenance

Support for the development and maintenance of a database to hold all data required by the Regulations will enable effective monitoring and reporting of Programme progress. Any necessary enhancements to the database resulting from the evolution of the Programme or changes to the management and control framework will also be supported.

(h) Dissemination of Commission correspondence & good practice**(i) Verification & Audit Activity**

Verification and audit activity is of key importance to ensure that error rates are kept to a minimum during the 2014-20 period. A key lesson learned through the 2007-13 Programme was to invest resources in verification and audit activities from a very early stage and in advance of the submission of claims to the Commission. It is crucial that the AA has sufficient resources to undertake all the fieldwork and reporting within the Regulatory timeframes established. Strong audit and control processes and procedures will ensure that the EC can take assurance from findings produced. This will also minimise the audit burden on beneficiaries as there will be less need for follow up visits and actions.

(j) Support for the administration of the Programme to include resources for data capture and input and processing claims for payment (utilising Simplified Cost Options where possible)

The use of simplified costs has the potential to greatly reduce the level of verification required by the IB on the costs incurred by beneficiaries. Nevertheless, it is vital that sufficient resources are available to support data input and processing of claims in a timely and efficient manner to ensure that beneficiaries are not unduly disadvantaged.

Simplified Cost options will reduce the administrative burden associated with the management and implementation of the Programme. Despite this, there will be significant ERDF information requirements which will include capture and reporting of performance data. These will be supported under PA 4 as appropriate.

(k) Additional Staff costs within the Programme Delivery Bodies (which include the MA, Certifying and AAs, and Intermediate Bodies with delegated responsibility for ERDF management and administration)

To ensure effective and compliant implementation, the Programme must be adequately resourced. Experience of the 2007-13 Programme evidences that fully trained and efficient administrative support is crucial. A core staff will be supported to ensure effective Programme delivery and implementation.

(l) Travel and subsistence costs associated with Programme development, management, implementation and closure

(m) Expertise (e.g. State Aid, Construction, Technical) as required for effective and robust Programme implementation

Priority axis	4 - Technical Assistance
<p>Elements of the Programme will be complex and expertise may be required to ensure effective management and delivery.</p> <p>(n) Closure of 2007-2013 Programme</p> <p>(o) Development of post 2020 Programme</p> <p>[62] ‘The Programming Period 2014-20: Guidance Document on Monitoring and Evaluation – ERDF and Cohesion Fund – Concepts and Recommendations, March 2014: http://ec.europa.eu/regional_policy/sources/docoffic/2014/working/wd_2014_en.pdf</p> <p>[63] http://www.eucompni.gov.uk/uploads/files/DETI_Mid_Term_Evaluation_-_Final_Aug_2011_.PDF</p> <p>[64] http://ec.europa.eu/regional_policy/what/future/pdf/partnership/uk_position_paper.pdf</p>	

2.B.6.2 Output indicators expected to contribute to results

Table 13: Output indicators (by priority axis) (for ERDF/ESF/Cohesion Fund)

Priority axis		4 - Technical Assistance				
ID	Indicator (name of indicator)	Measurement unit	Target value (2023) (optional)			Source of data
			M	W	T	
PO41	Number of Projects supported	Projects				DETI Managing Authority
PO42	N+3	EUR				Database
PO43	Annual Error Rate	%				Audit Authority
PO44	Programme Evaluations (conducted by external evaluators)	Evaluations				DETI Managing Authority
PO45	Communications Strategy	Strategy			1.00	DETI Managing Authority
PO46	Major information activities (Reg (EU) No 1303/2013 Art 155 and Annex XI refers)	Activities				DETI Managing Authority
PO47	Number of Training Events	Events				DETI Managing Authority
PO48	Number of employees (FTEs) whose salaries are co-financed by TA	FTE				DETI Managing Authority
PO49	Evaluation Plan	Plan			1.00	DETI Managing Authority

2.B.7 Categories of intervention (by priority axis)

Corresponding categories of intervention based on a nomenclature adopted by the Commission, and an indicative breakdown of the Union support

Tables 14-16: Categories of intervention

Table 14: Dimension 1 - Intervention field

Priority axis		4 - Technical Assistance	
Fund	Category of region	Code	€ Amount
ERDF	Transition	121. Preparation, implementation, monitoring and inspection	9,856,800.00
ERDF	Transition	122. Evaluation and studies	1,848,150.00
ERDF	Transition	123. Information and communication	616,235.00

Table 15: Dimension 2 - Form of finance

Priority axis		4 - Technical Assistance	
Fund	Category of region	Code	€ Amount
ERDF	Transition	01. Non-repayable grant	12,321,185.00

Table 16: Dimension 3 – Territory type

Priority axis		4 - Technical Assistance	
Fund	Category of region	Code	€ Amount
ERDF	Transition	07. Not applicable	12,321,185.00

3. FINANCING PLAN

3.1 Financial appropriation from each fund and amounts for performance reserve

Table 17

Fund	Category of region	2014		2015		2016		2017		2018		2019		2020		Total	
		Main allocation	Performance reserve	Main allocation	Performance reserve												
ERDF	Transition	38,945,790.00	2,485,901.00	39,725,491.00	2,535,670.00	40,520,692.00	2,586,427.00	42,523,346.00	2,714,256.00	43,374,335.00	2,768,575.00	44,242,328.00	2,823,978.00	45,127,613.00	2,880,486.00	294,459,595.00	18,795,293.00
Total		38,945,790.00	2,485,901.00	39,725,491.00	2,535,670.00	40,520,692.00	2,586,427.00	42,523,346.00	2,714,256.00	43,374,335.00	2,768,575.00	44,242,328.00	2,823,978.00	45,127,613.00	2,880,486.00	294,459,595.00	18,795,293.00

3.2 Total financial appropriation by fund and national co-financing (€)

Table 18a: Financing plan

Priority axis	Fund	Category of region	Basis for calculation of Union support (Total eligible cost or public eligible cost)	Union support (a)	National counterpart (b) = (c) + (d)	Indicative breakdown of national counterpart		Total funding (e) = (a) + (b)	Co-financing rate (f) = (a) / (e) (2)	EIB contributions (g)	Main allocation		Performance reserve		Performance reserve amount as proportion of total Union support (l) = (j) / (a) * 100
						National public funding (c)	National private funding (d) (1)				Union support (h) = (a) - (j)	National Counterpart (i) = (b) - (k)	Union support (j)	National Counterpart (k) = (b) * (j) / (a)	
1	ERDF	Transition	Total	113,485,234.00	75,656,823.00	3,130,001.00	72,526,822.00	189,142,057.00	59.9999998943%	0.00	106,392,407.00	70,928,272.00	7,092,827.00	4,728,551.00	6.25%
2	ERDF	Transition	Total	140,840,469.00	93,893,646.00	31,380,145.00	62,513,501.00	234,734,115.00	60.0000000000%	0.00	132,051,003.00	88,034,002.00	8,789,466.00	5,859,644.00	6.24%
3	ERDF	Transition	Total	46,608,000.00	31,072,000.00	0.00	31,072,000.00	77,680,000.00	60.0000000000%	0.00	43,695,000.00	29,130,000.00	2,913,000.00	1,942,000.00	6.25%
4	ERDF	Transition	Total	12,321,185.00	8,214,124.00	8,214,124.00	0.00	20,535,309.00	59.9999980521%	0.00	12,321,185.00	8,214,124.00			
Total	ERDF	Transition		313,254,888.00	208,836,593.00	42,724,270.00	166,112,323.00	522,091,481.00	59.9999998851%		294,459,595.00	196,306,398.00	18,795,293.00	12,530,195.00	6.00%
Grand total				313,254,888.00	208,836,593.00	42,724,270.00	166,112,323.00	522,091,481.00	59.9999998851%	0.00	294,459,595.00	196,306,398.00	18,795,293.00	12,530,195.00	

(1) To be completed only when priority axes are expressed in total costs.

(2) This rate may be rounded to the nearest whole number in the table. The precise rate used to reimburse payments is the ratio (f).

Table 18c: Breakdown of the financial plan by priority axis, fund, category of region and thematic objective

Priority axis	Fund	Category of region	Thematic objective	Union support	National counterpart	Total funding
Strengthening Research, Technical Development and Innovation	ERDF	Transition	Strengthening research, technological development and innovation	113,485,234.00	75,656,823.00	189,142,057.00
Enhancing the Competitiveness of SMEs	ERDF	Transition	Enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector (for the EAFRD) and the fisheries and aquaculture sector (for the EMFF)	140,840,469.00	93,893,646.00	234,734,115.00
Supporting the Shift Towards a Low Carbon Economy in all Sectors	ERDF	Transition	Supporting the shift towards a low-carbon economy in all sectors	46,608,000.00	31,072,000.00	77,680,000.00
Total				300,933,703.00	200,622,469.00	501,556,172.00

Table 19: Indicative amount of support to be used for climate change objectives

Priority axis	Indicative amount of support to be used for climate change objectives (€)	Proportion of the total allocation to the operational programme (%)
3	32,538,656.40	10.39%
Total	32,538,656.40	10.39%

4. INTEGRATED APPROACH TO TERRITORIAL DEVELOPMENT

Description of the integrated approach to territorial development taking into account the content and objectives of the operational programme having regard to the Partnership Agreement and showing how it the operational programme contributes to the accomplishment of the objectives of the operational programme and expected results

4.1 Community-led local development (where appropriate)

The approach to the use of community-led local development instruments and the principles for identifying the areas in where they will be implemented

Given the limited size of NI as a region of only 1.8m people, Community Led Local Development (CLLD) will not be used to implement the Programme. This section is therefore not applicable.

4.2 Integrated actions for sustainable urban development (where appropriate)

Where appropriate the indicative amount of ERDF support for integrated actions for sustainable urban development to be implemented in accordance with the provisions under Article 7(2) of Regulation (EU) No 1301/2013 and the indicative allocation of ESF support for integrated action.

This section is not applicable. The UK Partnership Agreement details that London will deliver the UK 5% minimum threshold for Sustainable Urban Development. This is in line with the provisions of Article 7 of Regulation (EU) No 1301/2013. This approach reflects the relative size of London and the fact that the Greater London Authority has an established designation as an Intermediate Body for the 2007-2013 ERDF Operational Programme.

In Northern Ireland, the NIES recognises the importance of Belfast and Londonderry as key drivers of regional growth. ESI Funds will be used to support local activity in these and other areas.

Table 20: Integrated actions for sustainable urban development – indicative amounts of ERDF and ESF support

Fund	ERDF and ESF support (indicative) (€)	Proportion of fund's total allocation to programme
Total ERDF	0.00	0.00%
TOTAL ERDF+ESF	0.00	0.00%

4.3 Integrated Territorial Investment (ITI) (where appropriate)

The approach to the use of Integrated Territorial Investments (ITIs) (as defined in Article 36 of Regulation (EU) No 1303/2013) other than in cases covered by 4.2, and their indicative financial allocation from each priority axis.

This section is not applicable. Local development initiatives will play a role in the delivery of the EU 2020 objectives of smart, sustainable and inclusive growth in NI. The Programme includes a Local Economic Development (LED) dimension. This will be the responsibility of Invest NI as Intermediate Body for PA 2 – Enhancing the Competitiveness of SMEs – of the Programme. Activity in the LED element of PA 2 will support small and micro businesses.

Table 21: Indicative financial allocation to ITI other than those mentioned under point 4.2 (aggregate amount)

Priority axis	Fund	Indicative financial allocation (Union support) (€)
Total		0.00

4.4 The arrangements for interregional and transnational actions, within the operational programme, with beneficiaries located in at least one other Member State (where appropriate)

This section is not applicable to the 2014-20 ERDF Investment for Growth and Jobs Programme for Northern Ireland.

4.5 Contribution of the planned actions under the programme to macro-regional and sea basin strategies, subject to the needs of the programme area as identified by the Member State (where appropriate)

(Where the Member State and regions participate in macro-regional strategies and sea basin strategies).

The Atlantic Strategy is strongly focused on the development of the “Blue Economy”, stimulating the creation of marine networks, synergies and exchanges of best practices between Member States, and implementation of specific Atlantic Strategy actions is voluntary for Member States, as outlined in the UKPA.

The NI ERDF Programme has been developed on the basis of NI needs and development priorities as evidenced through NI strategies, CSRs and the Commission’s 2012 Position

Paper. With numerous competing and pressing priorities for ERDF funding directly related to the aims of TOs 1, 3 and 4, implementation of Atlantic Strategy actions is not directly targeted. However, the nature of research and innovation activity planned means that there may be projects supported that contribute to blue growth.

5. SPECIFIC NEEDS OF GEOGRAPHICAL AREAS MOST AFFECTED BY POVERTY OR TARGET GROUPS AT HIGHEST RISK OF DISCRIMINATION OR SOCIAL EXCLUSION (WHERE APPROPRIATE)

5.1 Geographical areas most affected by poverty/target groups at highest risk of discrimination or social exclusion

This section is not applicable to the 2014-20 ERDF Investment for Growth and Jobs Programme for Northern Ireland.

5.2 Strategy to address the specific needs of geographical areas most affected by poverty/target groups at highest risk of discrimination or social exclusion, and where relevant, the contribution to the integrated approach set out in the Partnership Agreement

This section is not applicable to the 2014-20 ERDF Investment for Growth and Jobs Programme for Northern Ireland.

Table 22: Actions to address specific needs of geographical areas most affected by poverty/target groups at highest risk of discrimination or social exclusion

Target group/geographical area	Main types of planned action as part of integrated approach	Priority axis	Fund	Category of region	Investment priority
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6. SPECIFIC NEEDS OF GEOGRAPHICAL AREAS WHICH SUFFER FROM SEVERE AND PERMANENT NATURAL OR DEMOGRAPHIC HANDICAPS (WHERE APPROPRIATE)

This section is not applicable to the 2014-20 ERDF Investment for Growth and Jobs Programme for Northern Ireland.

7. AUTHORITIES AND BODIES RESPONSIBLE FOR MANAGEMENT, CONTROL AND AUDIT AND THE ROLE OF RELEVANT PARTNERS

7.1 Relevant authorities and bodies

Table 23: Relevant authorities and bodies

Authority/body	Name of authority/body and department or unit	Name of the person responsible for the authority/body (position or post)
Managing authority	Department for the Economy (DfE)	Maeve Hamilton
Certifying authority	Department for the Economy (DfE)	David Conliffe
Audit authority	Department for the Economy (DfE)	Jackie Connolly
Body to which Commission will make payments	Department for the Economy (DfE)	David Conliffe

7.2 Involvement of relevant partners

7.2.1 Actions taken to involve the relevant partners in the preparation of the operational programme, and the role of those partners in the implementation, monitoring and evaluation of the programme

DfE (formally DETI) co-ordinated preparation of the Programme in partnership with DoF (formally DFP) (as Member State), DfE (formally Dept. for Employment and Learning (DEL) (MA for ESF Programme), and DAERA (formally Dept. of Agriculture & Rural Development (DARD)) (MA for the EAFRD Programme).

In accordance with the partnership and multi-level governance approach, representatives from a range of partnership groups were involved in preparation of the Programme including competent urban and public authorities, economic & social partners, & various bodies representing civil society including environmental partners, non-governmental organisations, and bodies responsible for promoting social inclusion, gender equality and non-discrimination.

To ensure a cohesive partnership approach and to facilitate the wide involvement and active participation of the partnership groups, a number of formal mechanisms were put in place to provide a forum to provide their input to the development of the Programme as summarised below:

EU Steering Group (Future Funding)

The Steering Group, comprised of representatives from all NI departments, provided an oversight role for the development of the NI ESIF Programmes.

Through this group, a number of working groups were created which focused on specific strands of Programme Development. ERDF and ESF Working Groups were established

at an early stage to consider activities with the potential to be included in the respective Programmes, with a further working group convened to develop Programme delivery mechanisms.

Consultative Partnership Group (ConPG)

Chaired by DoF, the ConPG was established to consider and discuss issues relating to the development of NI's ESIF Programmes & provided a forum through which key partners had an on-going and meaningful influence on the development and preparation of the 2014-20 ERDF/ESF Programmes.

Members represented a wide range of relevant partners including social partners; local Government representatives; trade unions; the voluntary and community sector; environment and climate change; energy; education, agri-rural sectors, and the Equality Commission.

The primary focus of the ConPG was the preparation of the UKPA, with particular reference to the NI Chapter, development of the ERDF and ESF Programmes, and also served as a means to keep stakeholders informed of progress on the Territorial Cooperation and Rural Development programmes as part of the Common Strategic Framework approach.

The Group considered and provided feedback on key documents presented from DfE on their proposals for Programme development, with input from the NI Statistics and Research Agency (NISRA) as Ex Ante Evaluators and DOF. This included the Consultation Document, the draft OP, Socio-Economic Analysis, Ex-ante Evaluation of the Programme, Ex Ante Assessment of Financial Instruments (FIs) and the Strategic Environmental Assessment (SEA) which assessed the potential impact of proposed supports on climate change.

Core Programming Group (CPG)

A core group of those responsible for drafting programmes for the 2014-20 period also met regularly and worked to produce sets of proposals within a single NI socio-economic narrative to serve as input to the UKPA. The group reported to the EU Steering Group (Future Funding).

Local Government Working Group (LGWG)

A key role for the CPG was to carry out extensive consultation with NI Councils and their representative bodies to develop the Local Economic Development (LED) strand of the Programme. The Regulation (EU) No 1301/2013 recognises the important role that local development initiatives can play in the delivery of the EU2020 objectives of smart, sustainable and inclusive growth, and €18m ERDF has been allocated towards the LED

strand which will contribute significantly towards the specific objectives and results for PA 2.

Under the auspices of the LGWG, DfE worked in partnership with MAs and local government representatives throughout the programme development process. This ongoing liaison and consultation has been crucial to ensure that their views and concerns were considered in the development of the Programme. Strategic decisions as regards the direction of the Programme were significantly influenced by this key partnership group, with local government having a key role to play in the delivery of PA 2 in partnership with Invest NI as Intermediate Body.

Informal Member State Consultation on the 2014-20 Programmes

In the early stages of Programme development DoF carried out an informal consultation exercise on the strategic direction that the NI Executive should set for using future European Funding for which NI might qualify in the period 2014-20[65]. This informal consultation was launched on DoF's website, and invitations to participate were issued to nearly 300 organisations including Councils, community and voluntary groups, universities and colleges, library boards, charitable groups, trade unions, farmers unions, government departments and their agencies.

Formal Consultations

Formal consultations on the Programme were based on a detailed document that presented the DfE's outline proposals for the Programme and the supporting rationale, and gave some detail on the types of activity to be supported. It also set the NI economic context and provided an explanation of the Regulations governing the development and implementation of the Programme which largely determine what can/cannot be supported.

The consultation document identified a series of proposed activities to be taken forward through the Programme, with a focus on the delivering against EU TOs 1, 3 and 4.

The consultation sought the views of the public on 5 key facets of the Programme, namely the proposed focus, priorities, interventions, delivery mechanisms and implementation.

In the interests of gaining valuable input from partnership groups and other key stakeholders, the Consultation document was then put out to Inter-Departmental and Public Consultation.

Inter-Departmental Consultation

DfE co-ordinated an Inter-Departmental Consultation exercise, advising all NI Departments of its proposals for the development of the Programme and actively seeking their feedback.

A number of Departments responded to the Consultation document. This feedback was taken into consideration by DfE in the development of the Programme.

Public Consultation

Published on DfE's Internet and NI Direct, notified in the press and launched by the Minister, DfE held a public consultation on the draft OP, to seek the views of interested individuals and organisations across NI.

To ensure a partnership approach, the public consultation periods for the ESF, EAFRD and ERDF Programmes overlapped, to provide partnership groups and consultees with the opportunity to compare the supports proposed for provision in each of the Programmes and to identify areas of potential complementarity.

In accordance with Section 75 of the NI Act 1998, each public authority is required, in carrying out its functions relating to NI, to have due regard to the need to promote equality of opportunity between certain different individuals and groups. With equality at the heart of the consultation process DfE, in addition to general notification of the consultation, issued notice of the Programme consultation to over 160 Section 75 groups to enable access to the consultation document and encourage participation.

Overall, the comments received in response to the public consultation endorsed the approach being proposed, with 91% of respondents either agreeing or strongly agreeing that the ERDF Programme should concentrate on the three identified priorities. 79% of responses agreed that the proposed focus of the Programme was sufficient given the limited resources likely to be available for NI. A number of respondents raised points on the proposed delivery mechanisms. However comments primarily related to the LED strand of the programme which continued to evolve following the consultation period, in close partnership with local government representatives, DfE and DoF.

Partner Input to Key Documents

The principle of partnership was also at the heart of the preparation of a number of key documents that informed the strategic development of the ERDF Programme, including the S3 Framework, Ex Ante Assessment of Financial Instruments (FIs) and the SEA.

The S3 Framework, which was developed by DfE Innovation Policy Unit, underpins the strategic decisions made as regards the sectoral focus of ERDF support provided under PA 1.

The Ex Ante Assessment, which was carried out by an independent consultancy team, identified the optimum suite of FIs that should be included in the ERDF Programme to achieve maximum benefit for NI, both in terms of meeting the specific financial needs of SMEs in the region, but also to gain maximum impact from ERDF Funds through leverage of private investment. The Ex Ante Assessment itself involved wide-reaching consultation with key stakeholders including representatives from UK central government departments, the banking industry, business, university, venture capital and debt, and the European Commission. The findings of the Ex Ante Assessment informed the design of Financial Instrument supports to be provided under PA 2.

As detailed earlier in this section, close liaison with partners in local government proved invaluable in shaping the LED strand of PA 2

Early consultation with the DfC and DfI was key to identification of Grid Strengthening project replacement activities. Working in tandem with these departments and their partners in NI Housing Executive and Translink enabled the early identification of alternative activity which would contribute to meaningful results in delivery of a low carbon economy.

Partnership in the Implementation, Monitoring and Evaluation of the Programme

Many of the partners involved in the development of the Programme will continue their involvement through the implementation phase. This will include local government and non-Departmental Public Bodies (NDPBs) who will take forward Intermediate Body and Delivery Partner roles under PAs 1 and 2, and officials within the DfC and DfI who will undertake lead roles in implementing projects under PA 3.

Intermediate Bodies

As permitted by the provisions of Article 123 (7) of Regulation No (EU) 1303/2013, DfE as MA may entrust the management of part of a Programme to an Intermediate Body by way of agreement in writing.

Invest NI will undertake the role of Intermediate Body for the Programme, with responsibility for implementing schemes/operations under PAs 1 and 2; and DfE Energy Division will undertake the role of Intermediate Body with responsibility for implementing schemes/operations under PA 3.

As Intermediate Bodies, Invest NI, DfC and DfI will distribute, administer and manage, on behalf of the MA, funding provided by the EC and national match funding for the respective schemes/operations under their control which have been designated as eligible for inclusion in the Programme.

Memoranda of Understanding will be drawn up and agreed between DfE, as Programme MA and each Intermediary Body, setting out in detail the role of each Intermediary Body in relation to the management of the Programme.

Partnership Groups will also have a key role to play in the ongoing monitoring and evaluation of the Programme. Mechanisms to ensure their ongoing involvement include:

Monitoring Committee

In accordance with Regulation (EU) No 1303/2013, DoF as Member State will establish a single Monitoring Committee for the NI ERDF and ESF Programmes within three months of the European Commission's adoption of the Programmes.

In establishing the role and responsibilities of the Monitoring Committee, the principles of partnership set out in the Commission Delegated Regulation (EU) No 240/2014 will be applied.

The Monitoring Committee will monitor implementation of the Programmes and progress made towards achieving its objectives, in agreement with DfE as MA for the ERDF and ESF Programmes respectively.

The membership and composition of the Monitoring Committee will be determined by DoF. At minimum, membership will include representatives from the relevant Member State authorities and intermediate bodies, and representatives of the partnership organisations involved in the development and implementation of the Programme to include Inter-Departmental representation and representation from implementation and delivery partners.

TA will be utilised to ensure active participation of partners in the implementation, monitoring and evaluation of the Programme.

Cross-Cutting Working Groups

Equality – The need to ensure that Section 75 equality requirements are met will be built into Programme implementation and monitoring structures. It is anticipated that a key facet of this will be the formation of an Equality Working Group to oversee the Equality

aspects of Programme delivery. The new Monitoring Committee will be invited to form the group, which will operate on a cross-Departmental basis and whose membership will include representatives from the Equality Commission.

Environment – Sustainable development is one of the horizontal principles of the ERDF Programme. A SEA of the Programme was commissioned by DoF, and measures will be taken to ensure that the Mitigating Actions and Recommendations set out in the report are given due consideration and necessary action taken to ensure that environmental protection requirements, resource efficiency, climate change mitigation and adaptation, disaster resilience and risk prevention and management requirements are met. The new Monitoring Committee will be invited to form an Environmental Working Group to take this forward in partnership with representatives from the Environmental sector.

[65]

http://www.dfpni.gov.uk/reflections_exercise_collation_of_responses_received_june_2012.pdf

7.2.2 *Global grants* (for the ESF, where appropriate)

7.2.3 *Allocation of an amount for capacity building* (for the ESF, where appropriate)

8. COORDINATION BETWEEN THE FUNDS, THE EAFRD, THE EMFF AND OTHER UNION AND NATIONAL FUNDING INSTRUMENTS, AND WITH THE EIB

The mechanisms to ensure coordination between the Funds, the European Agricultural Fund for Rural Development (EAFRD), the European Maritime and Fisheries Fund (EMFF) and other Union and national funding instruments, and with the European Investment Bank (EIB), taking into account the relevant provisions laid down in the Common Strategic Framework.

The MA will seek to coordinate ESI Funds delivered through this Programme with other relevant Union instruments at EU and NI level. During Programme development steps were taken to ensure a coordinated approach with relevant EU and national funding instruments. This will continue during implementation.

The OP will coordinate with a range of other ESI Funds, EU instruments and national funding provision. Coordination and complementarity will vary by PA. It is likely there will be more coordination between this Programme, ESI Funds and national provision.

Monitoring Committee

Coordination of the ERDF and ESF Programmes will be overseen by a single Monitoring Committee (MC). The MC will scrutinize implementation of the Programmes and progress made towards achieving objectives. See Section 7 for further details.

ESF - Priority Skills

Activity under PA 1 will form the largest part of the Programme. It will support a wide range of RD&I projects primarily within five strategic sectors that have been identified through the S3 Framework. The five sectors offer a range of positive economic benefits including high GVA, employment, export potential, high RD&I spend, higher wages and high levels of knowledge spill over. By further increasing expenditure on RD&I in priority sectors through focussed ERDF support, this Programme has the potential to deliver increased GVA and drive economic growth and prosperity.

Through TO 10, the ESF programme will focus support on priority sectors as identified in the NI Skills Strategy – Transforming Futures. This objective complements the activity to be undertaken in PA 1. Each sector pinpointed through the S3 Framework in PA 1 has also been identified for support by the DEL (ESF MA) through Priority Skills. Priority Skills seeks to ensure that the skills needs of economically important industries are supported by Government. Through it the NI Executive is working to ensure individuals and businesses in identified priority sectors gain the necessary priority skills needed to drive economic growth.

EAFRD

The EAFRD Programme aims to foster competitive and sustainable rural businesses. It will focus support for innovation through actions which enhance the application of results of agri-food research and improve the exchange of information between researchers and agri-food businesses and between Member States.

Central to improving innovation will be support for the operational groups for the European Innovation Partnership (EIP), whose purpose will be to advance innovation in the agricultural sector. Development activities supported by EIP groups may well be

connected to research which is itself being supported via other instruments such as Horizon 2020 or other research funding sources.

In addition to the support for the EIP groups the EAFRD programme will support pilot and demonstration projects, and actions to support the transfer of the innovation outcomes to the agri-food industry.

Where an agri-food sector SME has used Invest NI support to research or develop a new product or secure new export orders, support from EAFRD will enable the SME to make the physical investment required to take advantage of the new innovation/export opportunities. As such it will be directly complementary to the Grant for Research and Development and Design supports that will be made available to companies in the agri-food sector through Invest NI with support from the ERDF Programme.

The aims of the EAFRD Innovation and Knowledge Transfer Strategy include improving the low level of awareness of new technologies among farmers and producers; supporting technology transfer activity through peer group learning; improving awareness of recent and ongoing research within NI across all sectors; providing structures for the two-way flow of innovative ideas between the industry and researchers; and improving and adapting knowledge transfer styles to the target group of agriculture and food production.

The S3 Framework that informed the development of PA 1 identifies Agri-Food Technology as a key sector that offers NI increased growth potential. It has been included as one of five key sectors that will be targeted for ERDF support under PA 1 which will include support for RD&I, and Design support. This support will complement the EAFRD Programme.

Through the mechanism of EIP groups under the EAFRD Programme, better linkages can be created between research and practical farming. This will also allow research from across Europe to feed into innovative projects in NI, and make NI findings available to farmers throughout Europe.

The activities supported through EAFRD will have a research basis and a practical application for farm businesses in NI. They will directly complement the grants for R&D and design interventions supported under PA 1.

The various innovation and knowledge transfer supports provided to agri-businesses through EAFRD will also complement the suite of ERDF supports under PA 2 which have been designed to enhance the competitiveness of SMEs in NI.

Interreg V – NI, Scotland, Republic of Ireland (RoI)

SEUPB was responsible for preparing the Interreg V Programme.

It seeks to support a number of sector specific cross border Competence Centres under TO 1, specifically in Renewable Energy and Life and Health Sciences sectors. This complements activity to be taken forward under PA1 of the NI ERDF Programme. Recognising the importance of concentrating ERDF resources to deliver maximum benefit and greatest impact, each programme proposes to use ERDF funding to target separate key growth areas identified within the S3 Framework. These proposed Competence Centres will also complement activity under PA 3 designed to support increased use of renewable energy and the focus in PA 1 of the programme on potential

high growth opportunities within the Stratified Medicine and Connected Health sector. Invest NI will be the Intermediate Body for PA 1 of the NI ERDF Programme.

Under TO 1 the Programme will seek to support a number of strategic cross border innovation and collaborative RD&I projects. Interreg V assistance will support cross border links between businesses and research institutions in NI and the RoI.

Whilst RD&I support delivered through Interreg V will be distinctly different to that provided under this Programme, it will contribute to the overall macroeconomic objective of the ERDF Programme to increase the level of NI BERD.

It is anticipated that the Interreg V Monitoring Committee will include a representative from DETI, who will provide sectoral input on activity to be supported by Interreg V under TO 1. It will also help ensure coordination and complementary between the RD&I elements of both this Programme and Interreg V.

PEACE IV

SEUPB is responsible for the PEACE IV Programme. Activity will centre on promoting social inclusion, combating poverty and discrimination in accordance with the aims of TO 9, with key themes being Shared Education, Children and Young People, Shared Spaces and Services and Civil Society. The social aims of the Programme will be more closely aligned with the objectives of the ESF Programme.

Invest NI

Invest NI is the regional economic development agency for NI, delivering a range of supports to businesses aimed at growing the local economy and helping local businesses compete in international markets. It will be the Intermediate Body for PA 1 and PA 2, delivering approximately 81% (€249m ERDF) of the Programme including all RD&I activity in PA 1 and all Access to Finance and SME growth and development activity in PA 2.

Actions related to R&D Structural Fund support through the ERDF Programme and the Horizon 2020 Programme will be undertaken by Invest NI's R&D Division, providing a structure to ensure that relevant companies can explore the possibility of getting support for their projects from both ERDF and Horizon 2020. This could be for different costs in the same project, or for follow on projects supported in the first instance through ERDF (Grant for R&D) or Horizon 2020. As the R&D team will also be focusing on companies within the S3 Framework sectors, they will be able to clearly identify where resources from ERDF, Horizon 2020 and other programmes can be most effectively utilized.

R&D Executives will assess projects in terms of business need and consider the most appropriate mechanism for support, ensuring that synergies are considered across funding mechanisms, with customer needs and the economic benefit to NI at the forefront.

Invest NI is responsible for the delivery of a range of regional funding instruments designed to support RD&I and SME growth and development. Supports that will complement activity to be supported under this Programme include Innovation Vouchers; Knowledge Transfer Programme; Proof of Concept; and Export Advice.

Horizon 2020 - UK and regional national contact points for SMEs

Horizon 2020 is the FI implementing the Innovation Union, an EU 2020 flagship initiative aimed at securing Europe's global competitiveness. It is part of the drive to create new growth in Europe and is the successor to Framework Programme 7 (FP7).

NI has set an ambitious target - to secure at least €145m from Horizon 2020. This is an 80% increase in NI's success in FP7. To help researchers from across academia and business deliver this target the Executive has enhanced the support available to potential applicants, including establishment of a Horizon 2020 Contact Point Network. Over £2m has been made available to fund the Network which comprises 12 research experts across the key thematic areas where NI has research expertise in both academia and business.

The thematic areas in which the NICPs are focussed align with the S3 Framework priorities. Delivering on the S3 Framework priorities will be critical in achieving some of the key R&D targets which have been set out in the NI Innovation Strategy - this includes having a total annual RD&I expenditure of £1.2 billion by 2025. Central to delivering this level of RD&I expenditure will be having more NI organisations become part of international research collaborations which will in turn attract additional research funding into NI. This will also directly support delivery of the PA 1 objective to increase BERD as a proportion of GVA.

COSME

COSME has four elements: access to finance, access to markets, framework conditions and the promotion of entrepreneurship and an entrepreneurial culture.

While the COSME loan guarantee facility is not considered appropriate for NI, the equity facility is potentially of benefit to SMEs, who could benefit from the equity funds that will be established in the UK, RoI or other Member States. However SMEs may still find it difficult to source the type of funding needed and, as part of the UK's bid for Enterprise Europe Network (EEN) funding, Invest NI is planning to provide a signposting service to help SMEs find suitable funding sources.

The Programme ex-ante assessment of FIs considered the COSME loan guarantee and equity facilities. Recommendations reflected under PA 2 ensure co-ordination and complementarity between the FIs to be supported under this Programme and COSME.

JASPERS

In the absence of any major project application, utilisation of JASPERS is not required.

Sea Basin Strategies

Implementation of specific Atlantic Strategy actions is voluntary for Member States, as outlined in the UKPA.

This Programme has been developed on the basis of NI development priorities as evidenced through NI strategies, CSR and the Commission's 2012 Position Paper. With numerous competing priorities for ERDF funding directly related to the aims of TOs 1, 3 and 4, implementation of Atlantic Strategy actions was not deemed a specific priority.

The North Sea Mediterranean (NSMed) Corridor covers six Member States including the UK (of which Northern Ireland is a region) and Ireland. The NSMed study, published in 2014, identified a number of corridor-specific objectives to support the delivery of the wider TEN-T objectives of improving cohesion, efficiency and sustainability. Most importantly, NSMed objectives included increasing the use of interoperable telematics technology; integrating cross-border initiatives and improving level of service for longer distance links. Activity proposed within the BRT aligns to these key issues and offer potential to contribute significantly to the development of the NSMed.

DfI's previous work in the TEN-T funded Easyway project (Ref: 2009-EU-50000-M) and the Arc Atlantique project (Ref: 2013-EU-50006-P) demonstrated that such projects can be effective catalysts in delivering a region's vision of an efficient and sustainable transport system. They facilitated the safe, efficient and clean movement of passengers and freight and were led by national road authorities and operators in co-operation with other stakeholders which included the automotive industry, telecom operators and public transport stakeholders.

A logical and systematic next step from the Easyway and Arc Atlantique projects will include taking the lessons learned and using these to support effective deployment into the public transport arena. An integrated ticketing system delivered through an intelligent platform that is unhindered by the inflexibility of outdated and proprietary operating systems lies at the heart of this progression.

Development of the project will deliver air quality improvements across the public sector transport network as a result of network efficiency improvements, related deployment of BRT low-emission vehicles, and reductions in congestion in at least one key node on the NSMed Corridor (Belfast)

The 2014 Core Network Corridor Study for the NSMed Corridor recognised the particular challenges facing peripheral areas such as Northern Ireland and concluded that the development of micro level multi-modal transport systems are a critical factor in improving corridor efficiency at a macro level.

9. EX-ANTE CONDITIONALITIES

9.1 Ex-ante conditionalities

Information on the assessment of the applicability and the fulfilment of ex-ante conditionalities (optional).

The Northern Ireland S3 Framework has been published and is available on the DETI website. A copy of the S3 Framework was presented to the EU Commission in September 2014, along with the Innovation Strategy for Northern Ireland 2014 – 2025 (innovateNI). The S3 Framework identifies a series of unique regional characteristics and highlights NI's areas of competitive advantage by focusing on a limited set of key regional priorities.

Table 24: Applicable ex-ante conditionalities and assessment of their fulfilment

Ex-ante conditionality	Priority axes to which conditionality applies	Ex-ante conditionality fulfilled (Yes/No/Partially)
T.01.1 - Research and innovation: The existence of a national or regional smart specialisation strategy in line with the National Reform Program, to leverage private research and innovation expenditure, which complies with the features of well performing national or regional R&I systems.	1 - Strengthening Research, Technical Development and Innovation	Yes
T.03.1 - Specific actions have been carried out to underpin the promotion of entrepreneurship taking into account the Small Business Act (SBA).	2 - Enhancing the Competitiveness of SMEs	Yes
T.04.1 - Actions have been carried out to promote cost effective improvements of energy end use efficiency and cost effective investment in energy efficiency when constructing or renovating buildings.	3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors	Yes
G.1 - The existence of administrative capacity for the implementation and application of Union anti-discrimination law and policy in the field of ESI Funds.	1 - Strengthening Research, Technical Development and Innovation 2 - Enhancing the Competitiveness of SMEs 3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors 4 - Technical Assistance	Yes
G.2 - The existence of administrative capacity for the implementation and application of Union gender equality law and policy in the field of ESI	1 - Strengthening Research, Technical Development and Innovation 2 - Enhancing the Competitiveness of SMEs	Yes

Ex-ante conditionality	Priority axes to which conditionality applies	Ex-ante conditionality fulfilled (Yes/No/Partially)
Funds.	3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors 4 - Technical Assistance	
G.3 - The existence of administrative capacity for the implementation and application of the United Nations Convention on the rights of persons with disabilities (UNCRPD) in the field of ESI Funds in accordance with Council Decision 2010/48/EC.	1 - Strengthening Research, Technical Development and Innovation 2 - Enhancing the Competitiveness of SMEs 3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors 4 - Technical Assistance	Yes
G.4 - The existence of arrangements for the effective application of Union public procurement law in the field of the ESI Funds.	1 - Strengthening Research, Technical Development and Innovation 2 - Enhancing the Competitiveness of SMEs 3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors 4 - Technical Assistance	Yes
G.5 - The existence of arrangements for the effective application of Union State aid rules in the field of the ESI Funds.	1 - Strengthening Research, Technical Development and Innovation 2 - Enhancing the Competitiveness of SMEs 3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors 4 - Technical Assistance	Yes
G.6 - The existence of arrangements for the effective application of Union environmental legislation related to EIA and SEA.	1 - Strengthening Research, Technical Development and Innovation 2 - Enhancing the Competitiveness of SMEs 3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors 4 - Technical Assistance	Yes
G.7 - The existence of a statistical basis necessary to undertake evaluations to assess the effectiveness and impact of the programmes. The existence of a system of result indicators necessary to select actions, which most effectively contribute to desired results, to monitor progress towards results and to undertake impact evaluation.	1 - Strengthening Research, Technical Development and Innovation 2 - Enhancing the Competitiveness of SMEs 3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors 4 - Technical Assistance	Yes

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
T.01.1 - Research and innovation: The existence of a national or regional smart specialisation strategy in line with the National Reform Program, to leverage private research and innovation expenditure, which complies with the features of well performing national or regional R&I systems.	1 - A national or regional smart specialisation strategy is in place that:	Yes	The Northern Ireland Framework for Smart Specialisation (S3 Framework) was published in 2014. This sits alongside the Innovation Strategy for Northern Ireland 2014-2025 (InnovateNI) Both the S3 Framework and InnovateNI are available on the DETI website - http://www.detini.gov.uk/index/what-we-do/deti-eco-dev-index/deti-eco-dev-research-development.htm	The Framework for Smart Specialisation (S3 Framework) references a variety of detailed regional research and innovation analysis commissioned by the NI Executive in its development of the Northern Ireland Economic Strategy and the Innovation Strategy for Northern Ireland 2014-2025 (InnovateNI).
T.01.1 - Research and innovation: The existence of a national or regional smart specialisation strategy in line with the National Reform Program, to leverage private research and innovation expenditure, which complies with the features of well performing national or regional R&I systems.	2 - is based on a SWOT or similar analysis to concentrate resources on a limited set of research and innovation priorities;	Yes	The S3 Framework has undertaken a SWOT analysis to concentrate resources on a limited set of Northern Ireland priority areas identified as offering competitive advantage. Both the S3 Framework and Innovate NI are available on the DETI website - http://www.detini.gov.uk/index/what-we-do/deti-eco-dev-index/deti-eco-dev-research-development.htm	The Northern Ireland Framework for Smart Specialisation was published in 2014.

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
T.01.1 - Research and innovation: The existence of a national or regional smart specialisation strategy in line with the National Reform Program, to leverage private research and innovation expenditure, which complies with the features of well performing national or regional R&I systems.	3 - outlines measures to stimulate private RTD investment;	Yes	The Northern Ireland Economic Strategy (NIES) 2030 and InnovateNI both detail a range of commitments made by the NI Executive to stimulate private sector investment in innovation. Both the S3 Framework and InnovateNI are available on the DETI website - http://www.detini.gov.uk/index/what-we-do/deti-eco-dev-index/deti-eco-dev-research-development.htm	The UK corporation tax credit system for firms who invest in R&D has financial costs of over £1 billion (€1.25 billion) PA. The number of claims & firms making claims has risen every year since the schemes were first introduced, including throughout the recent recession. Recent amendments have increased the scales of financial incentive. UK government has recently introduced a new Patent Box programme to incentivise, through tax systems, investments made by firms in developing or using patented technology. These tax credit schemes impact more significantly in stimulating investment by the private sector than many other public funding programmes.
T.01.1 - Research and innovation: The existence of a national or regional smart specialisation strategy in line with the National Reform Program, to leverage private research and innovation expenditure, which complies with the features of well performing national or regional R&I systems.	4 - contains a monitoring mechanism.	Yes	The UK government publishes the comprehensive Annual Innovation Report for the UK.	In Northern Ireland an annual report will be published on progress of the implementation of actions identified in InnovateNI and submitted to the Northern Ireland Sub-Committee on the Economy. A detailed portfolio of specific innovation performance indicators have been identified to measure progress on the key themes of InnovateNI and a monitoring methodology has been developed,

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
				<p>based on;</p> <ul style="list-style-type: none"> • Long-term strategic goals based on regional benchmarking and increased employment in knowledge-intensive sectors; and • Medium-term indicators based on the broad Innovation Strategy themes. <p>Research & Innovation indicators have been developed for the Growth & Jobs programme to complement the InnovateNI monitoring themes.</p> <p>InnovateNI proposes the establishment of an Innovation Council for Northern Ireland, which, when developed will have responsibility for monitoring the actions outlined in the Innovation Strategy for Northern Ireland.</p>
<p>T.01.1 - Research and innovation: The existence of a national or regional smart specialisation strategy in line with the National Reform Program, to leverage private research and innovation expenditure, which complies with the features of well performing national or regional R&I systems.</p>	<p>5 - A framework outlining available budgetary resources for research and innovation has been adopted.</p>	<p>Yes</p>	<p>http://www.detini.gov.uk/framework_for_smart_specialisation_-_final_draft_september_2014.pdf It is not possible to clearly outline the full NI and UK research and innovation budgetary framework for the full 7 year period of 2014-</p>	<p>As in many other Member States, it is not possible to clearly outline the full NI and UK research and innovation budgetary framework for the full 7 year period of 2014-2020 as the UK ordinarily operates a three year spending cycle (four years in NI). However, the UK government has prioritised R&D&I. The most recent spending review maintained resource</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
			2020. However the NI S3 strategy sets out in detail the strong commitment to R&D made by the NI Executive. This is also drawn out in the targets and milestones established in Innovate NI.	<p>funding for science in cash terms at £4.6 billion (€5.47 billion) in 2015-16, increased capital funding in real terms from £0.6 billion in 2012-13 to £1.1 billion in 2015-16. It also set a long-term capital budget for science in the next Parliament growing in line with inflation to 2020-21. At the same time, the government increased the annual budget for the Technology Strategy Board by an additional £185 million pa.</p> <p>The NI S3 Framework sets out in some detail the very strong financial commitment to research & development made by the NI Executive. This is also drawn out in the targets and milestones established in Innovate NI.</p>
T.03.1 - Specific actions have been carried out to underpin the promotion of entrepreneurship taking into account the Small Business Act (SBA).	1 - The specific actions are: measures have been put in place with the objective of reducing the time and cost involved in setting-up a business taking account of the targets of the SBA;	Yes	<p>The Plan for Growth UK Government (2011) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221514/2011budget_growth.pdf Reducing Regulation made simple UK Government (2010) http://www.insolvency.gov.uk/asets/biscore/better-regulation/docs/r/10-1155-</p>	<p>Both publications set out how the UK Government is implementing the Coalition Agreement commitments relating to reducing the regulatory burden on small businesses.</p> <p>The UK has very effective evaluation arrangements in place to monitor the ongoing implementation of SBA. SME Envoys are fulfilling their role as a monitor / watchdog. This has been successful in a number of areas, e.g. Ergonomics Directive; sharing best practice; discussing topical priority</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
			reducing-regulation-made-simple.pdf	<p>issues; taking views from SME organisations etc.</p> <p>Particularly important is the SME Envoy role to monitor “Think Small First” principle, the use of the SME test, and to press for reduction in the acquis / smart regulation.</p> <p>UK Envoy wrote to DG ENTR (Daniel Calleja) in October 2012 pressing for continued and sustained action in 2013 in those areas.</p> <p>UK Envoy was lead “rapporteur” on smart regulation during 2013.</p>
T.03.1 - Specific actions have been carried out to underpin the promotion of entrepreneurship taking into account the Small Business Act (SBA).	2 - The specific actions are: measures have been put in place with the objective of reducing the time needed to get licenses and permits to take up and perform the specific activity of an enterprise taking account of the targets of the SBA;	Yes	<p>The Plan for Growth UK Government (2011) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221514/2011budget_growth.pdf Reducing Regulation made simple UK Government (2010) http://www.insolvency.gov.uk/assets/biscore/better-regulation/docs/r/10-1155-reducing-regulation-made-simple.pdf</p>	<p>The UK has implemented a number of initiatives and are now in a position where the average time to incorporate is just 10 hours, including weekends, (fastest is 10mins).</p> <p>Cost to incorporate a business now stands at just £15.</p> <p>Altogether, 97% of incorporations are now carried out digitally.</p> <p>Action taken includes:</p> <p>Simpler requirements as part of companies act 2006</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
				<p>Web incorporation service</p> <p>Corporation tax registration info collected as part of web incorporation service</p> <p>Range of 3rd party software solutions in place.</p>
<p>T.03.1 - Specific actions have been carried out to underpin the promotion of entrepreneurship taking into account the Small Business Act (SBA).</p>	<p>3 - The specific actions are: mechanism is in place to monitor the implementation of the measures of the SBA which have been put in place and assess the impact on SMEs.</p>	<p>Yes</p>	<p>The Plan for Growth UK Government (2011) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221514/2011budget_growth.pdf Reducing Regulation made simple UK Government (2010) http://www.insolvency.gov.uk/assets/biscore/better-regulation/docs/r/10-1155-reducing-regulation-made-simple.pdf</p>	<p>An SME Envoy, a senior civil servant in Government, ensures that the ongoing implementation of the Single Business Act is taken forward by monitoring the Think Small First principle, implementing the use of the SME test, and pressing for smart regulation principles to be embedded.</p> <p>UK Envoy was lead “rapporteur” on smart regulation during 2013.</p> <p>Whilst the UK has not adopted a specific strategy for SBA implementation, current SME policy is linked to the SBA and its associated criteria and is fully in line with the aspirations and goals of the SBA. The UK has very effective evaluation arrangements in place to monitor ongoing implementation of SBA.</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
<p>T.04.1 - Actions have been carried out to promote cost effective improvements of energy end use efficiency and cost effective investment in energy efficiency when constructing or renovating buildings.</p>	<p>1 - The actions are: measures to ensure minimum requirements are in place related to the energy performance of buildings consistent with Article 3, Article 4 and Article 5 of Directive 2010/31/EU of the European Parliament and of the Council;</p>	<p>Yes</p>	<p>Energy Performance of Buildings Legislation (NI) https://www.finance-ni.gov.uk/articles/energy-performance-buildings-legislation The Energy Performance of Buildings (Certificates and Inspections) Regulations (Northern Ireland) 2008 https://www.finance-ni.gov.uk/sites/default/files/publications/dfp/energy-performance-of-buildings-regulations-2008.pdf The Energy Performance of Buildings (Certificates and Inspections) (Amendment) Regulations (Northern Ireland) 2014 https://www.finance-ni.gov.uk/publications/energy-performance-buildings-certificates-and-inspections-amendment-regulations</p>	<p>The Energy Performance of Buildings (Certificates and Inspection) (Amendment) Regulations 2014 were made on 24th February 2014 to respond to outstanding requirements of the (recast) Directive on the Energy Performance of Buildings 2012/31/EU. A subsequent amendment, the Energy Performance of Buildings (Certificates and Inspections) (Amendment) Regulations 2016, makes further minor legislative clarifications, with no impact on industry or previous working practices.</p> <p>Background</p> <p>A recast of the Energy Performance of Buildings Directive published in May 2010 seeks to clarify certain aspects of the 2003 Directive, extend its scope, strengthen certain provisions, and give the public sector a leading role in promoting energy efficiency. DoF progressed amendments to the Energy Performance of Buildings (Certificates and Inspections) Regulations (Northern Ireland) 2008 to implement the new requirements of this Directive.</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
T.04.1 - Actions have been carried out to promote cost effective improvements of energy end use efficiency and cost effective investment in energy efficiency when constructing or renovating buildings.	2 - The actions are: measures necessary to establish a system of certification of the energy performance of buildings consistent with Article 11 of Directive 2010/31/EU;	Yes	Energy Performance Certificates guide https://www.finance-ni.gov.uk/sites/default/files/publications/dfp/energy-performance-certificate-quick-guide-leaflet.pdf	<p>EPCs are required whenever a building is constructed or for existing buildings, before it is marketed for sale or rent.</p> <p>The EPC records the energy efficiency of a property, providing a rating of the energy efficiency and carbon emissions of a building on a scale from A to G, where A is very efficient and G is very inefficient.</p> <p>EPCs are produced using standard methods about energy usage so that the energy efficiency of one building can easily be compared with another building of the same type. This allows prospective buyers, tenants, owners, and occupiers to see and compare information on the energy efficiency and carbon emissions from a building, so they can consider energy efficiency and fuel costs as part of their investment decision.</p> <p>An EPC will include a recommendation report listing measures (such as low and zero carbon generating systems) to improve the energy rating of the building. The EPC also contains information about the rating that could be achieved if all the recommendations were implemented.</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
T.04.1 - Actions have been carried out to promote cost effective improvements of energy end use efficiency and cost effective investment in energy efficiency when constructing or renovating buildings.	3 - The actions are: measures to ensure strategic planning on energy efficiency, consistent with Article 3 of Directive 2012/27/EU of the European Parliament and of the Council;	Yes	UK National Energy Efficiency Action Plan https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/307993/uk_national_energy_efficiency_action_plan.pdf The Energy Efficiency (Eligible Buildings) Regulations 2013 http://www.legislation.gov.uk/uk-si/2013/3220/pdfs/uksi_20133220_en.pdf	The NEAP explains how the implementation of the Energy Efficiency Directive will help release the UK's cost effective energy efficiency potential. The UK target is a reduction of 18% of final energy demand by 2020. Progress was reported in the 2014 UK National Energy Efficiency Action Plan.
T.04.1 - Actions have been carried out to promote cost effective improvements of energy end use efficiency and cost effective investment in energy efficiency when constructing or renovating buildings.	4 - The actions are: measures consistent with Article 13 of Directive 2006/32/EC of the European Parliament and of the Council on energy end-use efficiency and energy services to ensure the provision to final customers of individual meters in so far as it is technically possible, financially reasonable and proportionate in relation to the potential energy savings.	Yes	Energy Management in Public Sector Buildings https://www.finance-ni.gov.uk/sites/default/files/publications/dfp/Energy-management-in-public-sector-buildings-manual-may-2015.pdf	The "Energy Manual" was published in 2007 to help raise awareness of energy saving in public sector buildings. There have been a number of significant changes which have impacted energy use in buildings. This includes publication of EU Directives such as Energy Performance of Buildings Directive (2010/31/EU), Energy Efficiency Directive (2012/27/EU), Renewable Energy Directive (2009/28/EC), changes to the Carbon Reduction Commitment (CRC) Energy Efficiency Scheme and various EU and UK energy targets. This document provides an overview of some of the key changes and

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
				<p>practical steps that can be taken to improve energy efficiency in public sector buildings. Primarily aimed at NICS departments, Agencies, Non Departmental Public Bodies (NDPBs) and Public Corporations however, it will also be of use to other public sector bodies in Northern Ireland (NI).</p> <p>In relation to Art 13 (1), domestic, public sector and business premises in Great Britain and Northern Ireland that are served by licensed gas and electricity suppliers, are already provided with individual meters.</p>
<p>G.1 - The existence of administrative capacity for the implementation and application of Union anti-discrimination law and policy in the field of ESI Funds.</p>	<p>1 - Arrangements in accordance with the institutional and legal framework of Member States for the involvement of bodies responsible for the promotion of equal treatment of all persons throughout the preparation and implementation of programmes, including the provision of advice on equality in ESI fund related activities.</p>	<p>Yes</p>	<p>Details for the UK Equality Act 2010 can be found through the following link: http://www.legislation.gov.uk/ukpga/2012/15/contents http://www.equalityhumanrights.com/explains-the-work-of-the-ehrc The principle of Equality in Northern Ireland law is set out in Section 75 of the Northern Ireland Act 1998: http://www.legislation.gov.uk/ukpga/1998/47/section/75</p>	<p>The legislative framework for all equalities (anti-discrimination, gender and disability) are contained in the UK Equality Act 2010 which is applicable in Great Britain.</p> <p>The Equality & Human Rights Commission (EHRC) was formed in 2007 and fully complies with Article 13 of Directive 2000/43/EC.</p> <p>Northern Ireland has its own legislation.</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
G.1 - The existence of administrative capacity for the implementation and application of Union anti-discrimination law and policy in the field of ESI Funds.	2 - Arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of Union anti discrimination law and policy.	Yes	NI is committed to meeting this objective. The principle of Equality is already embedded in Northern Ireland law and policy. Section 75 of the Northern Ireland Act 1998 requires public authorities to promote equality of opportunity across the full range of equalities. This act established an Equality Commission for Northern Ireland. All NI Departments are required to publish their Equality policies and to report annually to the Equality Commission on their implementation.	<p>All UK Managing Authorities will ensure that arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of Union antidiscrimination law and policy will be put in place.</p> <p>Generic training within the Northern Ireland Civil Service continues to be delivered by the Centre for Applied Learning (CAL) which offers a number of equality-related training courses, including courses on:</p> <ul style="list-style-type: none"> • Diversity • Conducting an EQIA • Screening of Policies • Consultation Processes in Northern Ireland <p>In addition to generic training on offer, CAL works with departments/business areas within the Northern Ireland Civil Service to contextualise any aspect of Equality training.</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
G.2 - The existence of administrative capacity for the implementation and application of Union gender equality law and policy in the field of ESI Funds.	1 - Arrangements in accordance with the institutional and legal framework of Member States for the involvement of bodies responsible for gender equality throughout the preparation and implementation of programmes, including the provision of advice on gender equality in ESI Fund-related activities.	Yes	<p>Details for the UK Equality Act 2010 can be found through the following link: http://www.legislation.gov.uk/ukpga/2012/15/contents http://www.equalityhumanrights.com/ explains the work of the EHRC The principle of Equality in Northern Ireland law is set out in Section 75 of the Northern Ireland Act 1998: http://www.legislation.gov.uk/ukpga/1998/47/section/75</p>	<p>The legislative framework for all equalities (anti-discrimination, gender and disability) are contained in the Equality Act 2010 which is applicable across the UK.</p> <p>The Equality & Human Rights Commission (EHRC) was formed in 2007 and fully complies with Article 13 of Directive 2000/43/EC.</p> <p>Northern Ireland has its own legislation</p>
G.2 - The existence of administrative capacity for the implementation and application of Union gender equality law and policy in the field of ESI Funds.	2 - Arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of Union gender equality law and policy as well as on gender mainstreaming.	Yes	<p>NI is committed to meeting this objective. The principle of Equality is already embedded in Northern Ireland law and policy. Section 75 of the Northern Ireland Act 1998 requires public authorities to promote equality of opportunity across the full range of equalities. This act established an Equality Commission for Northern Ireland. All NI Departments are required to publish their Equality policies and to report annually to</p>	<p>All UK Managing Authorities will ensure that arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of Union gender equality law and policy as well as on gender mainstreaming will be put in place.</p> <p>Generic training within the Northern Ireland Civil Service continues to be delivered by the Centre for Applied Learning (CAL) which offers a number of equality - related training courses, including courses on:</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
			the Equality Commission on their implementation	<ul style="list-style-type: none"> • Diversity • Conducting an EQIA • Screening of Policies • Consultation Processes in Northern Ireland <p>In addition to generic training on offer, CAL works with departments/business areas within the Northern Ireland Civil Service to contextualise any aspect of Equality training.</p>
G.3 - The existence of administrative capacity for the implementation and application of the United Nations Convention on the rights of persons with disabilities (UNCRPD) in the field of ESI Funds in accordance with Council Decision 2010/48/EC.	1 - Arrangements in accordance with the institutional and legal framework of Member States for the consultation and involvement of bodies in charge of protection of rights of persons with disabilities or representative organisations of persons with disabilities and other relevant stakeholders throughout the preparation and implementation of programmes.	Yes	<p>Details for the UK Equality Act 2010 can be found through the following link: http://www.legislation.gov.uk/ukpga/2012/15/contents http://www.equalityhumanrights.com/ explains the work of the EHRC The principle of Equality in Northern Ireland law is set out in Section 75 of the Northern Ireland Act 1998: http://www.legislation.gov.uk/ukpga/1998/47/section/75</p>	<p>The legislative framework for all equalities (anti-discrimination, gender and disability) are contained in the UK Equality Act 2010 which is applicable across the UK.</p> <p>The Equality & Human Rights Commission (EHRC) was formed in 2007 and fully complies with Article 13 of Directive 2000/43/EC.</p> <p>Northern Ireland has its own legislation</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
G.3 - The existence of administrative capacity for the implementation and application of the United Nations Convention on the rights of persons with disabilities (UNCRPD) in the field of ESI Funds in accordance with Council Decision 2010/48/EC.	2 - Arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of applicable Union and national disability law and policy, including accessibility and the practical application of the UNCRPD as reflected in Union and national legislation, as appropriate.	Yes	NI is committed to meeting this objective. The principle of Equality is already embedded in Northern Ireland law and policy. Section 75 of the Northern Ireland Act 1998 requires public authorities to promote equality of opportunity across the full range of equalities. This act established an Equality Commission for Northern Ireland. All NI Departments are required to publish their Equality policies and to report annually to the Equality Commission on their implementation	<p>Northern Ireland has its own legislation</p> <p>Generic training within the Northern Ireland Civil Service continues to be delivered by the Centre for Applied Learning (CAL) which offers a number of equality-related training courses, including courses on:</p> <ul style="list-style-type: none"> • Diversity • Conducting an EQIA • Screening of Policies • Consultation Processes in Northern Ireland <p>In addition to generic training on offer, CAL works with departments/business areas within the Northern Ireland Civil Service to contextualise any aspect of Equality training.</p>
G.3 - The existence of administrative capacity for the implementation and application of the United Nations Convention on the rights of persons with disabilities (UNCRPD) in the	3 - Arrangements to ensure monitoring of the implementation of Article 9 of the UNCRPD in relation to the ESI Funds throughout the preparation and the implementation of the programmes.	Yes	The UK is committed to meeting this objective. https://www.gov.uk/government/uploads/system/uploads/attachm	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/345120/uk-initial-report.pdf - Details the UN Convention of Rights of Persons with Disabilities and other

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
field of ESI Funds in accordance with Council Decision 2010/48/EC.			ent_data/file/345120/uk-initial-report.pdf http://www.equalityni.org/ECNI/media/ECNI/Publications/Delivering%20Equality/IMNI_CRPD_ParallelJurisdictionalReport_WorkingPaper_v1_080714.pdf	Office for Disabilities Issues (ODI) guidance. DWP are responsible for collating and providing contributions for inclusion with the UK Government reports to all UN Conventions and Covenants. A working paper has been drafted jointly by The Equality Commission for Northern Ireland and the Northern Ireland Human Rights Commission in furtherance of their role as the “Independent Mechanism” in Northern Ireland to promote, protect and monitor the implementation of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD).
G.4 - The existence of arrangements for the effective application of Union public procurement law in the field of the ESI Funds.	1 - Arrangements for the effective application of Union public procurement rules through appropriate mechanisms.	Yes	Public tendering arrangements are governed by the Public Contracts Directive (2004/18/EC): http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004L0018:en:NOT_Implemented_in_the_UK_by_Public_Contracts_Regulations_2006_(Statutory	The NI authorities will respect EU public procurement rules in particular [I] Directives 2004/18/EC and 2004/17/EC, [II] Directives 2014/23/EU, 2014/24/EU and 2014/25/EU once transposed into national legislation, [III] Directives 89/665/EEC and 92/13/EEC and [IV] the general public procurement principles derived from the TFEU.

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
			Instrument 2006/5): http://www.legislation.gov.uk/uk-si/2006/5/contents/made NI Public Procurement Policy - http://www.dfpni.gov.uk/index/procurement-2/cpd/cpd-policy-and-legislation/ni-pp-policy/ni_public_procurement_policy_-_version_11_august_2014.pdf	<p>Public procurement policy in NI is set by the NI Executive. The NI Public Procurement Policy (NIPPP) sets out the policies adopted by the Executive and the organisational structures established to implement them. The Procurement Board reports to the Executive and is accountable to the NI Assembly. The Board oversees the development and implementation of overarching policy and is supported in this activity by the Central Procurement Directorate (CPD) and the other Centres of Procurement Expertise (CoPEs).</p> <p>Procurement Guidance Notes (PGN) are the administrative means by which the NI Public Sector is advised of procurement policy and best practice developments.</p>
G.4 - The existence of arrangements for the effective application of Union public procurement law in the field of the ESI Funds.	2 - Arrangements which ensure transparent contract award procedures.	Yes	Bodies subject to NI PPP are required to follow the best practice set out in PGNs & must also conduct their procurement via Service Level Agreements (SLAs) with the relevant CoPE - http://www.dfpni.gov.uk/index/procurement-2/cpd/cpd-policy-	Contracts are awarded through open procurement exercises overseen by CPD.

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
			and-legislation/ni-pp-policy/cpd-list-of-bodies-public-procurement-policy-applies.htm CoPEs undergo periodic accreditation to ensure they are applying good practice procurement in support of the NI Executive's key priorities.	
G.4 - The existence of arrangements for the effective application of Union public procurement law in the field of the ESI Funds.	3 - Arrangements for training and dissemination of information for staff involved in the implementation of the ESI funds.	Yes	The Head of Procurement for each CoPE is responsible for ensuring that the organisation's governance arrangements comply with NI PPP, legislation and best practice guidance (PGNs). This will be assessed during CoPE reaccreditation. Centre for Applied Learning offer courses on Tender Evaluation and Contract Management - http://nical.nigov.net/index/search.lsim?qt=procurement&sr=0&n h=10&cs=iso-8859-1&sc=&sm=0&mt=1&ha=nical-cms-courses	Managing Authority staff with front line responsibility for verifying that public procurement rules are complied with in all EU co-financed projects will reference the Public Procurement Guidance for Practitioners on the avoidance of common errors in ESI Funded projects

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
G.4 - The existence of arrangements for the effective application of Union public procurement law in the field of the ESI Funds.	4 - Arrangements to ensure administrative capacity for implementation and application of Union public procurement rules.	Yes	The accreditation process assesses the ability of CoPEs to demonstrate that the procurement process is controlled by an adequate resource of qualified procurement/construction professionals.	
G.5 - The existence of arrangements for the effective application of Union State aid rules in the field of the ESI Funds.	1 - Arrangements for the effective application of Union State aid rules.	Yes	Public support under the programme must comply with procedural and material EC State Aid rules applicable when the public support is granted. The Intermediate Body or project implementer is primarily responsible for ensuring compliance with State Aid rules. https://www.gov.uk/state-aid http://www.dfpni.gov.uk/index/finance/afmd/afmd-key-guidance/afmd-mpmni/managing_public_money_ni_2012_annexes.pdf http://www.eucompni.gov.uk/uploads/resource_guidance/guidance_note_7_-_state_aid.pdf	BIS is responsible for setting UK State aid policy and coordinating notifications to the Commission General advice and support is provided, such as online guidance which explains the application of De Minimis and cumulation rules. In planning for and developing this programme, the intermediate bodies will be responsible for ensuring any State aid identified and appropriately handled. When present, the Managing Authority will also check that the intermediate body has properly implemented the project, either by ensuring that the State aid complies fully with an existing approved scheme or a block exemption or by ensuring the aid is separately notified and has received Commission approval. This will be

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
				<p>confirmed when the project, programme or measure is adopted / designated into the programme and from time to time throughout the implementation period.</p> <p>Existing Managing Public Money NI guidance and State Aid guidance notes are subject to ongoing review.</p>
<p>G.5 - The existence of arrangements for the effective application of Union State aid rules in the field of the ESI Funds.</p>	<p>2 - Arrangements for training and dissemination of information for staff involved in the implementation of the ESI funds.</p>	<p>Yes</p>	<p>Presentations from the DETI's State Aid awareness seminar from 16 September 2014 can be accessed at: http://www.detini.gov.uk/index/what-we-do/deti-euro-programme-index/state_aid_awareness_seminar.htm 2007-13 Programme guidance - http://www.eucompni.gov.uk/resources/publications/operating-manual-for-european-sustainable-competitiveness-programme-for-ni-last-updated-march-2013 Similar material for State Aid guidance will be provided for 2014-20 programmes once it is approved and up and running</p>	<p>The BIS State Aid team provides overarching advice and guidance to all UK public bodies and runs a Senior Officials Group for those dealing with State Aid in other departments to discuss issues and take decisions.</p> <p>Within Northern Ireland, the DfE European Fund Management has responsibility for providing advice and assistance to staff in the Member State, Managing Authority, Certifying Authority, Audit Authority and intermediate bodies on the 'industrial' State aid rules. When necessary, DfE's State Aid Unit will also provide 'one to one' advice and assistance to ensure any State aid issues are addressed.</p> <p>DfE's State Aid unit is committed to the delivery of annual state aid training courses for staff tasked with</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
				programme delivery.
G.5 - The existence of arrangements for the effective application of Union State aid rules in the field of the ESI Funds.	3 - Arrangements to ensure administrative capacity for implementation and application of Union State aid rules.	Yes	<p>Managing Public Money NI – Annex 4.9 http://www.dfpni.gov.uk/index/finance/afmd/afmd-key-guidance/afmd-mpmni/managing_public_money_ni_2012_annexes.pdf http://www.eucompni.gov.uk/uploads/resource_guidance/guidance_note_7_-_state_aid.pdf Operating Manual for Sustainable Competitiveness Programme – Chapter 6 refers http://www.eucompni.gov.uk/resources/publications/operating-manual-for-european-sustainable-competitiveness-programme-for-ni-last-updated-march-2013</p>	<p>Building on the experience gained during the existing programme, the Managing Authority will also ensure that all staff in the Managing Authority, Certifying Authority, Audit Authority and intermediate bodies have a basic understanding and awareness of the State aid rules and, when necessary, that staff are signposted to appropriate training, which may be internal or external, and information.</p> <p>Whilst the responsibility of aid administrators / Implementing Bodies to consider State Aid and to make decisions on how to comply, DfE offers advice and guidance on industrial State Aid matters including the current level of aid ceilings and can be contacted by email at stateaid@economy-ni.gov.uk.</p> <p>The 2007-13 Programme Operating Manual represents a further guidance resource.</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
G.6 - The existence of arrangements for the effective application of Union environmental legislation related to EIA and SEA.	1 - Arrangements for the effective application of Directive 2011/92/EU of the European Parliament and of the Council (EIA) and of Directive 2001/42/EC of the European Parliament and of the Council (SEA).	Yes	The Northern Ireland Environment Agency (NIEA) webpage - http://www.doeni.gov.uk/niea/land-home/sea-natural.htm provides details of SEA Directive & associated Regulations, SNIFFER Guidance, etc. Other relevant guidance papers are available including, the Practical Guide to the SEA Process and Services and Standards for Responsible Authorities - http://www.doeni.gov.uk/niea/bm_sea_practicalguide.pdf & http://www.doeni.gov.uk/niea/sea-servicesandstandards.pdf	The assessment of the fulfilment of the general ex-ante conditionality related to the EIA and SEA legislation is without prejudice to the obligation of the UK government to implement the CJEU judgement of 13 February 2014 (case (C-530/11) Commission v. UK). For the avoidance of doubt, the assessment of the fulfilment of this general ex-ante conditionality will not include any assessment of the implementation of the CJEU judgment.
G.6 - The existence of arrangements for the effective application of Union environmental legislation related to EIA and SEA.	2 - Arrangements for training and dissemination of information for staff involved in the implementation of the EIA and SEA Directives.	Yes	The NI Environment Agency (NIEA) webpage - http://www.doeni.gov.uk/niea/land-home/sea-natural.htm provides details of SEA Directive & associated Regulations, SNIFFER Guidance, etc. Other relevant guidance papers are available	In the UK, developers, competent authorities and statutory consultation bodies are responsible for ensuring processes are compliant with EIA / SEA regulations & that decisions are made taking into account a full assessment of significant environmental effects. EIA guidance is also provided on an individual basis either centrally by government or by bodies involved in the process.

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
			including, the Practical Guide to the SEA Process and Services and Standards for Responsible Authorities Guidance on the implementation of Development Path Analysis in NI (Guidance Note 12) - http://www.dfpni.gov.uk/guidance_note_12_-_development_path_analysis.pdf	SEA Directive 1 requires authorities with “environmental responsibilities” to be consulted at specific stages in the SEA process. SEA Regulations 2 transposing the Directive into law in NI, & similar legal provisions elsewhere in the UK, refer to these authorities as Consultation Bodies. They must be consulted by responsible Authorities, (the bodies which prepare plans and programmes subject to the Directive) and are responsible for ensuring that SEA is carried out. In NI the Dept. of the Environment is the designated consultation body and delivery of this function is led by the NI Environment Agency (NIEA)
G.6 - The existence of arrangements for the effective application of Union environmental legislation related to EIA and SEA.	3 - Arrangements to ensure sufficient administrative capacity.	Yes	The new Monitoring Committee will be invited to form an Environmental Working Group to take this forward in partnership with representatives from the Environmental sector. This group will oversee a review of existing guidance - http://www.dfpni.gov.uk/guidance_note_12_-_development_path_analysis.pdf	A Strategic Environmental Assessment of the ERDF Programme was commissioned by DFP, and it will be critical to ensure that the Mitigating Actions and Recommendations set out in the report are given due consideration and necessary action taken to ensure that environmental protection requirements, resource efficiency, climate change mitigation and adaptation, disaster resilience and risk prevention and management requirements are met.

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
				<p>The Northern Ireland Environmental Agency is qualified to provide technical assistance and expertise to the NI authorities in servicing of its SEA/EIA obligations.</p> <p>http://www.doeni.gov.uk/niea/built-home/conservation-2/sea-natural.htm</p>
<p>G.7 - The existence of a statistical basis necessary to undertake evaluations to assess the effectiveness and impact of the programmes. The existence of a system of result indicators necessary to select actions, which most effectively contribute to desired results, to monitor progress towards results and to undertake impact evaluation.</p>	<p>1 - Arrangements for timely collection and aggregation of statistical data with the following elements are in place: the identification of sources and mechanisms to ensure statistical validation.</p>	<p>Yes</p>	<p>A suite of indicators will be utilised to monitor the performance of each operation, as agreed by the MA, for the IP under which they are funded. All operations will have a profile of expected delivery in terms of expenditure and indicators. Data will be aggregated for the MA to evaluate programme level progress.</p>	<p>The basis of the proposed indicators and their associated targets has been assessed as part of the ex-ante evaluation by staff from the Northern Ireland Statistics and Research Agency. This assessment included checking of sources, validation, robustness, clarity and timeliness.</p> <p>The identification and selection of appropriate indicators, including the statistical basis for programme monitoring and evaluation, is a key component in the development and drafting of the 2014-2020 Programme, as well as in the Ex-Ante Evaluation of the proposed programmes.</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
<p>G.7 - The existence of a statistical basis necessary to undertake evaluations to assess the effectiveness and impact of the programmes. The existence of a system of result indicators necessary to select actions, which most effectively contribute to desired results, to monitor progress towards results and to undertake impact evaluation.</p>	<p>2 - Arrangements for timely collection and aggregation of statistical data with the following elements are in place: arrangements for publication and public availability of aggregated data.</p>	<p>Yes</p>	<p>NI has a strong statistical system based on both sample surveys and administrative data. Key statistics relevant to the monitoring and evaluation of the programme are routinely provided by the NISRA and shared with the UK National Statistics Institute and Eurostat. Statistical data relevant to the Programme is published on the DETI website. Information on data capture, storage and frequency of publication can be found at http://www.detini.gov.uk/deti-stats-index.htm.</p>	<p>Data is captured through an integrated business survey system and retained on secure government IT systems that are subject to regular IT health checks.</p> <p>The underlying rationale for the proposed indicators and their associated targets has been assessed as part of the ex-ante evaluation by staff from the Northern Ireland Statistics and Research Agency. This assessment included assessment of sources, validation, robustness, clarity and timeliness.</p> <p>The advice of the NISRA and DETI economists was instrumental in the development of a comprehensive Performance Framework, which will capture the result indicators for each investment priority, alongside relevant target indicators for each activity.</p> <p>Data is captured through an integrated business survey system and retained on secure government IT systems that are subject to regular IT health checks.</p>
<p>G.7 - The existence of a statistical basis necessary to undertake evaluations to assess the effectiveness and impact of the programmes. The</p>	<p>3 - An effective system of result indicators including: the selection of result indicators for each programme providing information on what</p>	<p>Yes</p>	<p>Targets are set for indicators contained within the Operational Programme and are shown in the</p>	<p>The advice of the NISRA and DETI economists was instrumental in the development of a comprehensive Performance Framework, which will</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
existence of a system of result indicators necessary to select actions, which most effectively contribute to desired results, to monitor progress towards results and to undertake impact evaluation.	motivates the selection of policy actions financed by the programme.		appropriate tables within the OP.	<p>capture the result indicators for each investment priority, alongside relevant target indicators for each activity.</p> <p>A Supplementary Paper has been drawn up to be read in conjunction with the OP which sets out source data, rationale for target values, method of data collection and proposed verification methods.</p>
G.7 - The existence of a statistical basis necessary to undertake evaluations to assess the effectiveness and impact of the programmes. The existence of a system of result indicators necessary to select actions, which most effectively contribute to desired results, to monitor progress towards results and to undertake impact evaluation.	4 - An effective system of result indicators including: the establishment of targets for these indicators.	Yes	The basis of the proposed indicators and their associated targets has been assessed as part of the ex-ante evaluation by staff from the Northern Ireland Statistics and Research Agency. This assessment included checking of sources, validation, robustness, clarity and timeliness. A Supplementary Paper has been drawn up to be read in conjunction with the OP which sets out source data, rationale for target values, method of data collection and proposed verification methods.	<p>Electronic Labour Market & Statistics Branch of NISRA produces Business, Economic, and Labour Market statistics in line with the Code of Practice for Official Statistics to monitor the performance of the NI Economy and Labour Market.</p> <p>NISRA ELMS and DETI Analytical Services Unit (ASU) is completely independent from the ERDF Programme and therefore the results obtained are objectively verifiable, and are not influenced by the requirements of the Programme.</p>

Ex-ante conditionality	Criteria	Criteria fulfilled (Yes/No)	Reference	Explanations
<p>G.7 - The existence of a statistical basis necessary to undertake evaluations to assess the effectiveness and impact of the programmes. The existence of a system of result indicators necessary to select actions, which most effectively contribute to desired results, to monitor progress towards results and to undertake impact evaluation.</p>	<p>5 - An effective system of result indicators including: the consistency of each indicator with the following requisites: robustness and statistical validation, clarity of normative interpretation, responsiveness to policy, timely collection of data.</p>	<p>Yes</p>	<p>A suite of indicators will be utilised to monitor the performance of each operation, as agreed by the MA, for the IP under which they are funded. All operations will have a profile of expected delivery in terms of expenditure and indicators. Data will be aggregated for the MA to evaluate programme level progress.</p>	
<p>G.7 - The existence of a statistical basis necessary to undertake evaluations to assess the effectiveness and impact of the programmes. The existence of a system of result indicators necessary to select actions, which most effectively contribute to desired results, to monitor progress towards results and to undertake impact evaluation.</p>	<p>6 - Procedures in place to ensure that all operations financed by the programme adopt an effective system of indicators.</p>	<p>Yes</p>	<p>The MA will work with implementing bodies to ensure indicators for proposed activities are reasoned and robust. Compliance and monitoring systems including on-the-spot verification visits will look at outputs against output indicators. This will link to the evaluation strategy looking at results across the programme.</p>	<p>DETI has endeavoured to report on the European Commission's standardised Common Output indicators, where possible, to enable consistent reporting across Member States so that the impact of ERDF funding can be measured at Union level.</p>

9.2 Description of actions to fulfil ex-ante conditionalities, responsible bodies and timetable

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

General ex-ante conditionality	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
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Table 26: Actions to fulfil applicable thematic ex-ante conditionalities

Thematic ex-ante conditionality	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
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10. REDUCTION OF ADMINISTRATIVE BURDEN FOR BENEFICIARIES

Summary of the assessment of the administrative burden for beneficiaries and, where necessary, the actions planned accompanied by an indicative timeframe to reduce administrative burden.

Current administrative burden in the administration of ERDF includes:

- Real cost vouching
- Audit burden on beneficiaries
- Audit trail (volume, storage and retention period)
- Reporting across a wide range of activities
- Database maintenance for a large number of small projects

This burden impacts at a number of levels:

Beneficiary

The beneficiary is responsible for ensuring that there is a full audit trail of all supporting documentation for the costs claimed. At present, in particular in administering grant schemes, this can involve a huge volume of information. In many cases, the grant support covers categories of expenditure such as salaries, overheads, production, travel and subsistence, capital equipment, marketing etc. Verification of these costs to underlying financial documents is a significant burden.

Beneficiaries have reported that the administrative burden of the current system is a significant disincentive when agreeing to undertake activity which is supported with EU funding. DETI is committed to the development of company capacity and export capacity and, as Managing Authority, will remove or lessen any barriers to development where possible.

The changes to the audit trail retention period stipulated by the EC have the potential to reduce the administrative burden in terms of data protection and storage. There is also significant scope for the use of simplified costs or Joint Action Plans to streamline administration for beneficiaries. The grant activity the Programme will support lends itself to application of unit cost methodologies similar to those already widely applied in ESF funded activities.

Intermediate Body (IB)

IBs are responsible for frontline assessment, monitoring and vouching of activity and expenditure. This currently involves vouching all expenditure prior to payment of grant. The expenditure once paid is then submitted to the Programme database for inclusion in a claim to the EC. The current system for vouching and verification of costs as described above, places a significant administrative burden on the IB.

The potential for high error rates in specific areas such as hourly rate calculations means significant resources are expended in recalculating grant payable and taking any necessary follow-up / corrective action. For the 2014-20 period, IBs have been encouraged, where possible, to procure services which are then implemented and paid for

on the basis of defined deliverables, thereby ensuring simplification at that level. However, some areas of the Programme will involve payment of grant to beneficiaries and the use of simplified costs has the potential to greatly reduce the level of verification required by the IB on the costs incurred by beneficiaries. These proposals would also promote focus on results and impacts to ensure that the Programme achieves its objectives.

Managing Authority (MA)

A system of second level checks has been employed for the 2007-2013 Programme. These supplementary checks provide added assurance on the eligibility of expenditure and have been instrumental in the reduction of error rates during the 2007-2013 Programme implementation period, and will be continued into the next Programme.

Verification based on simplified costs and/or outputs is much more efficient and current reports from the EC indicate that the use of simplified costs across other Programmes in the 2007-2013 period has been proven to deliver significantly reduced error rates.

Audit Authority (AA)

The annual audit of operations which forms the evidence base for the Programme error rate is currently conducted at the level of the beneficiary and based on verification of 'actual cost'. This requires examination of all the supporting documentation, as outlined above. The use of simplified costs could significantly change and reduce the work conducted by the AA.

DETI commissioned expertise to conduct a full review of all simplified cost options (SCOs) and delivery methods. The work of the Contractor was managed by a Steering Committee comprising the MA and IB representatives. The AA and Member State acted as advisors to the Committee. The Steering Group reviewed the initial work and findings and was able to identify opportunities for simplified costs, particularly in the administration of grant for RD&I. The Contractor was able to gather and analyse extensive relevant historic data on this scheme in order to identify unit cost options. A single unit cost for the entirety of the scheme is proposed and subject to AA and Member State approval will offer significant opportunity for simplification.

The fieldwork is complete and the findings were presented to the EC at a meeting on 14 April 2014. This confirmed that the methodology and findings were consistent with the Regulatory provisions.

DETI, as MA, will put the necessary systems in place which will mean that the unit cost methodology for RD&I can be introduced as soon as the Operational Programme is approved.

Main actions already taken to reduce administrative burden for 2014-20

By way of simplification, the 2014-20 Programme will focus on a small range of larger scale activity. A number of the key areas will be delivered by procurement and / or large

investment type payments. This will lead to streamlined procedures. It will also provide greater commonality in approach across the Business Areas tasked with delivery. This will significantly reduce the administrative burden in terms of annual and Programme Monitoring Committee reports. A reduced range of activity will also mean a shorter list of more focussed indicators and targets. Revised EC requirements in terms of the audit trail document retention period will be implemented which will reduce the burden at all levels of administration.

Table I in the Documents section provides details of the **Main actions planned to achieve a reduction in administrative burden with an indicative timeframe**

Potential scope for further reduction of administrative burden

There is further scope for simplification using pre-existing national models and rates as well as some of the ‘off-the-shelf’ options provided by the EC against overhead costs. These will be further analysed and policy developed which will be ready for implementation on approval of the Operational Programme.

11. HORIZONTAL PRINCIPLES

11.1 Sustainable development

Description of specific actions to take into account environmental protection requirements, resource efficiency, climate change mitigation and adaptation, disaster resilience and risk prevention and management, in the selection of operations.

The SEA highlighted Mitigating Actions and Recommendations to ensure that environmental protection requirements, resource efficiency, climate change mitigation & adaptation, disaster resilience and risk prevention and management requirements are met. The Monitoring Committee will be invited to form an Environmental Working Group to take this forward in partnership with Environmental sector reps. Specific selection criteria taking environmental issues (environmental related research, 'green' SMEs, green technology, green products, eco-innovation, air quality and emission control) into account will be approved as soon as possible.

Drawing on best practice from the previous programme DfE will ensure that IBs have in place sustainable development governance, policies and implementation plans.

Proposals will demonstrate how positive environmental aspects will be enhanced and negative effects minimised, at strategic and project levels, and will show how they support moving towards a low carbon economy, e.g. adhering to UK green procurement policies and through using nationally recognised building and civil engineering sustainability standards.

Adaptation and local resilience to a changing climate will be integrated within project proposals, specifically where these strengthen local economic development by managing risk, avoiding disinvestment and safeguarding growth.

Obligations in relation to environmental protection requirements and the principle of the 'polluter pays' is enshrined within the Environmental Liability (Prevention and Remediation) Regulations (NI) 2009.

Compliance with the NI Guide to Expenditure Appraisal and Evaluation and guidance on Equality of Opportunity and Sustainable Development in Public Sector Procurement will ensure the promotion of sustainable development.

The NI Executive's Sustainable Development Strategy entitled "Everyone's Involved"[66] sets out a framework to deliver sustainable development, supported by a Sustainable Development Implementation Plan (SDIP). DfE's Departmental Sustainability Statement[67] sets out the actions DfE will take to meet the objectives and

priorities set out in the SDIP, many of which are relevant to Invest NI, DFC and DfI in their IB roles.

Invest NI will ensure appropriate environmental practice is applied to projects in receipt of ERDF support and, as a condition of funding, all projects which might result in a negative impact on the environment will be subject to an environmental impact assessment.

Invest NI is committed to providing support to businesses to assist reduction in consumption of water, materials and energy and will periodically and independently evaluate, review and appraise this support as well as its work in promotion of business opportunities in sustainable energy technologies.

Projects seeking funding will be expected to comply with the requirements of EU directives and national legislation to safeguard or enhance sustainable development in NI.

Key actions undertaken by DfE Energy Division to support sustainable development, beyond the scope of this Programme, include:

- Ensuring relevant EU Directives are transposed and implemented to develop regional markets and promote continued market liberalisation in accordance with the EU vision for greater transparency and efficiency within electricity and gas markets.
- Extending the availability of natural gas as a lower carbon fuel, displacing more polluting fossil fuels, thus providing environmental benefits and enhancing fuel choice where it is economically viable to do so, and where not, maximise other alternatives such as renewable heat and/or biomass.
- Working with partners to help deliver the actions laid out in the Executive endorsed SEF.
- Developing a Renewable Heat Route Map setting out key actions to achieve the 2020 SEF target for renewable heat.
- Ensuring that electricity grid development plans are future proofed to facilitate a more decarbonised energy mix beyond 2020 including off-shore generation.
- Working in co-operation with the Utility Regulator, NIE and SONI to deliver new electricity grid infrastructure.
- Implementing the Offshore Renewable Energy Strategic Action Plan 2010-20 and Onshore Renewable Electricity Action Plan 2013-20.
- Supporting the development of a range of renewable technologies to ensure the most cost-effective and reliable mix of generation which maximises NI's sustainable energy resources and delivers the SEF target for electricity consumption from renewable sources by 2020.
- Working with other NI Departments, alongside partners in the Department of Energy & Climate Change, the Scottish and Irish Governments to achieve an

efficient and co-ordinated regional approach to planning for electricity, gas and oil emergencies.

All applicants must be mindful of environmental sustainability in the development of projects and should demonstrate how resource efficiency is embedded into their business.

The environmental impact of individually supported projects will be assessed in line with the Guidance on the implementation of Development Path Analysis in NI updated by NISRA and agreed by DFP as a horizontal theme.

[66] Everyone's Involved: http://www.ofmdfmi.gov.uk/sustainable-development-strategy-lowres__2_.pdf

[67] DfE Sustainability Statement: http://www.sustainableni.org/sustainable-development/the-sd-strategy-2010/implementation-plan-2011-2014/index.php?command=FILES_DOWNLOAD&download=5fa7a87d835d417503b70543ed94194a

11.2 Equal opportunities and non-discrimination

Description of specific actions to promote equal opportunities and prevent discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation during the preparation, design and implementation of the operational programme and in particular in relation to access to funding, taking account of the needs of the various target groups at risk of such discrimination and in particular the requirements for ensuring accessibility for persons with disabilities.

The principle of Equality is already embedded in NI law and policy. Section 75 of the Northern Ireland Act 1998 requires public authorities to promote equality of opportunity:

- between persons of different religious belief, political opinion, racial group, age,
- marital status or sexual orientation;
- between men and women generally;
- between persons with a disability and persons without; and
- between persons with dependants and persons without.

The Equality Commission for NI is an independent public body established under the Northern Ireland Act 1998. The Equality Commission aims to advance equality, promote equality of opportunity, encourage good relations and challenge discrimination through promotion, advice and enforcement.

All NI Departments are required to publish their Equality policies and to report annually to the Equality Commission on their implementation.

Representatives from the Equality Commission were represented on the Consultative Partnership Group advising on the preparations for ESIF Programmes 2014-20 and are expected to be represented on the Monitoring Committee for the Programmes, which shall establish working groups to oversee the implementation of horizontal principles in the Programmes.

As part of the ex-ante Evaluation process, Programmes undergo screening for Equality Impact Assessment (EqIA) and where appropriate, full assessment. DfE has carried out an initial pre-screening assessment of this Programme and has concluded that it can be screened out for full EqIA at this stage. As was the case for the 2007-2013 Competitiveness Programme, the Monitoring Committee will be invited to form an Equality Working Group to oversee the implementation of equality principles in the new Programme. The Equality Working Group will consider the need for a full EqIA and will commission the assessment if it is deemed to be required.

The NI Executive's commitment to improving community relations and continuing the journey towards a more united and shared society was further articulated in the 'Together: Building a United Community Strategy'.

Building a united community based on equality of opportunity, the desirability of good relations and the promotion of reconciliation is not only important for a society moving from conflict and division but is vital to shaping a modern, diverse and sustainable community which is equipped for the future.

To reinforce the importance of this Strategy, good relations principles will be mainstreamed into everything that government does in NI and this process will be constantly monitored by a ministerial panel. The delivery of ESI Funds 2014-20 will contribute to 'Together: Building a United Community' and will be monitored for this purpose.

In the NI Programme for Government (PfG) 2011-2015, the NI Executive reaffirmed its commitment to ensuring that no section of the community is left behind; equality of opportunity, fairness, inclusion and the promotion of good relations are cornerstones of our PfG priorities.

In addition to promoting gender, equality is one of the government's priorities and the Gender Equality Strategy for NI 2006-2016 provides a policy framework for our work to

mainstream gender equality and tackle gender inequalities. The Strategy acknowledges that women and children especially face particular challenges and have needs which have previously been overlooked.

The NI Executive's PfG 2011-2015 sets out its intention to deliver a range of measures to tackle social exclusion through the Delivering Social Change Framework.

The NI Executive acknowledges its responsibilities to deliver the commitments in the United Nations Convention on the Rights of Persons with Disabilities and is committed to measuring the impact of our efforts on longer term trends.

The NI Executive is committed to addressing and removing those obstacles and to ensuring that people with disabilities have equality of opportunity and equality of treatment that those without a disability enjoy.

The NI Executive's strategy acknowledges that people with disabilities deserve to be treated equally alongside those without disabilities. The purpose of the Strategy is to:

- Set out a high level policy framework to give coherence and guidance to NI Departments' activities across general and disability specific areas of policy,
- Drive improved performance of service delivery leading to improved outcomes for persons with a disability, and
- Increase the understanding and importance of the needs of persons with a disability and ensure these needs are recognised when policy is developed or when implementing initiatives which impact on disabled people.

11.3 Equality between men and women

Description of contribution of the operational programme to the promotion of equality between men and women and, where appropriate, the arrangements to ensure the integration of the gender perspective at operational programme and operation level.

As detailed above, promoting gender equality is one of the government's priorities and the Gender Equality Strategy[64] for NI 2006-2016 provides a policy framework to mainstream gender equality and tackle gender inequalities.

[68] Gender Equality Strategy For NI 2006-2016:
<http://www.ofmdfnni.gov.uk/genderequalitystrategy2006-2016.pdf>

12. SEPARATE ELEMENTS

12.1 Major projects to be implemented during programming period

Table 27: List of major projects

Project	Planned notification/submission date (year, quarter)	Planned start of implementation (year, quarter)	Planned completion date (year, quarter)	Priority Axes / Investment Priorities
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12.2 Performance framework of operational programme

Table 28: Performance framework by fund and category of region (summary table)

Priority axis	Fund	Category of region	Indicator or key implementation step	Measurement unit, where appropriate	Milestone for 2018			Final target (2023)		
					M	W	T	M	W	T
1 - Strengthening Research, Technical Development and Innovation	ERDF	Transition	Productive investment: Number of enterprises receiving support	Enterprises			973			2,361.00
1 - Strengthening Research, Technical Development and Innovation	ERDF	Transition	Expenditure	Euro			61,900,000.00			189,160,000.00
1 - Strengthening Research, Technical Development and Innovation	ERDF	Transition	Number of Enterprises engaged in R&D for the first time	Enterprises			66			200.00
2 - Enhancing the Competitiveness of SMEs	ERDF	Transition	Productive investment: Number of enterprises receiving support	Enterprises			191			710.00
2 - Enhancing the Competitiveness of SMEs	ERDF	Transition	Expenditure	Euro			64,500,000.00			234,733,753.00
3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors	ERDF	Transition	GHG reduction: Estimated annual decrease of GHG	Tonnes of CO2eq						4,211.00
3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors	ERDF	Transition	Expenditure	Euro			32,967,000			77,680,000.00
3 - Supporting the Shift Towards a Low Carbon Economy in all Sectors	ERDF	Transition	Completion of construction of the Depot	Phase				Physical completion of the depot to be		1.00

Priority axis	Fund	Category of region	Indicator or key implementation step	Measurement unit, where appropriate	Milestone for 2018			Final target (2023)		
					M	W	T	M	W	T
							completed			

12.3 Relevant partners involved in preparation of programme

Table J in the Documents section provides a list of relevant partners involved in the preparation of the Operational Programme.

Documents

Document title	Document type	Document date	Local reference	Commission reference	Files	Sent date	Sent By
Supplementary Paper (OP Modification Oct 2017)	Supplementary information	03-Oct-2017		Ares(2017)4820709	OP Supplementary Paper (Oct 2017)	03-Oct-2017	nloyalda
MA response to EC observations (Programme modification Oct 2017)	Supplementary information	03-Oct-2017		Ares(2017)4820709	MA response to EC observations	03-Oct-2017	nloyalda

Submitted annexes by the Commission implementing regulation laying down the model of the programme

Document title	Document type	Programme version	Document date	Local reference	Commission reference	Files	Sent date	Sent By
ERDF Ex-Ante Evaluation of the ERDF 2014 2020 Programme	Report of the ex-ante evaluation	1.1	29-Oct-2014	ExAnte-EVAL	Ares(2014)3627335	ERDF Ex-Ante Evaluation of the ERDF 2014 2020 Programme	31-Oct-2014	nwntheadr
Programme Snapshot of data before send 2014UK16RFOP003 2.1	Snapshot of data before send	2.1	03-Oct-2017		Ares(2017)4820709	Programme Snapshot of data before send 2014UK16RFOP003 2.1 en	03-Oct-2017	nloyalda

Latest validation results

Severity	Code	Message
Info		Programme version has been validated.
Warning	2.13.1	The total Union support (main+performance) per Fund/year (ERDF/2017) in Table 17 should be equal to the total Union support for the programme/Fund/year in the last partnership agreement sent to the Commission (2014UK16M8PA001 3.2) : 45,237,602.00 - 43,969,832.00
Warning	2.13.1	The total Union support (main+performance) per Fund/year (ERDF/2018) in Table 17 should be equal to the total Union support for the programme/Fund/year in the last partnership agreement sent to the Commission (2014UK16M8PA001 3.2) : 46,142,910.00 - 44,849,784.00
Warning	2.13.1	The total Union support (main+performance) per Fund/year (ERDF/2020) in Table 17 should be equal to the total Union support for the programme/Fund/year in the last partnership agreement sent to the Commission (2014UK16M8PA001 3.2) : 48,008,099.00 - 46,662,731.00
Warning	2.13.1	The total Union support (main+performance) per Fund/year (ERDF/2019) in Table 17 should be equal to the total Union support for the programme/Fund/year in the last partnership agreement sent to the Commission (2014UK16M8PA001 3.2) : 47,066,306.00 - 45,747,318.00
Warning	2.18.3	At least one indicator must be defined in the relevant indicator tables. Priority axis "3", investment priority "4a", specific objective "SO5", Table 3
Warning	2.18.4	At least one indicator must be defined in the relevant indicator tables. Priority axis "3", investment priority "4a", Table 5
Warning	2.18.6	At least one indicator must be defined in the relevant indicator tables. Priority axis "4", specific objective "SO6", Table 12
Warning	2.20	At least one record must be defined in Table 22.
Warning	2.53	Indicator "CO34" has both a total milestone value and a gender breakdown or no milestone value at all in Table 6 for priority axis "3".

Severity	Code	Message
Warning	2.65	The total ESF allocation (Main + Performance Reserve from Table 17) over all IGJ Programmes of country "UK" is not equal to the total ESF allocation in Table 1.4.1 of the Partnership Agreement with CCI "2014UK16M8PA001": "4,951,836,999.00", "4,942,593,693.00".