



S34Growth

Interreg Europe



S34Growth addresses regional policy instruments facilitating industrial innovation-related interregional collaboration which can help the renewal of Europe's industry and boost competitiveness.

www.interregeurope.eu/s34growth

Regional Action Plan: Scotland

Scottish Context

The following document is a key output of the S34Growth Interreg Europe project and sets out the main actions of Scotland's Regional Action Plan. The overarching objective of the S34Growth project was to "To develop and improve existing regional policy mechanisms and instruments to facilitate interregional collaboration which in turn will support the renewal of Europe's industry and competitiveness."

The project focuses on industrial innovation-related interregional collaboration to support the advanced manufacturing sector, reflecting Scotland's Smart Specialisation priorities.

The Scottish participation in the S34Growth programme is led by Scottish Enterprise, Scotland's leading innovation and investment agency, but has also engaged Scottish Government, and through Scotland Europa, other public agencies such as Highlands & Islands Enterprise, the Scottish Funding Council and Scotland's leading universities.

This Action Plan aims to support the Scottish Government's key goal on Innovation, to help improve Scotland's innovation performance to equal the best-performing economies.

Scotland's emerging Smart Specialisation focus is based on realising major niche opportunities in global markets, that can generate significant growth, in key areas clusters and sub-sectors where Scotland has clear competitive advantage. These opportunities centre on adoption of new technology and ways of working that are applicable to many sectors and regions across Scotland.

- High Value Manufacturing: to put Scottish manufacturing at the forefront of Industry 4.0 adoption and transform manufacturing capability in our key sectors
- Digital Economy: to grow and maintain a thriving digital economy and be a global leader in data driven innovation
- Low Carbon Transition: to realise fully the long term, sustainable economic potential of world-leading low carbon innovation

The programme also contributes to other aspects of Scotland's Smart Specialisation focus:

- As part of the priority given in Scotland to Inclusive Growth, targeting industry growth in local economies.
- Building on the research strengths of Scotland's universities, improving links with industry and SMEs, both within Scotland and across the EU.
- Stimulating innovation, supply chain development and productivity improvements in mature, domestically-focussed sectors with large numbers of employees.

RAP Action One: Manufacturing Industry 4.0 Service

Background – The S34Growth OSDDs in the Basque Country and Catalonia expressed confidence in supporting their industries (particularly SMEs) capitalise on current and future Industry 4.0 concepts. In Bilbao Industry 4.0 is actively being promoted as a journey rather than a pre-defined destination that companies should strive towards. The region exuded real confidence in engaging companies around industry 4.0 concepts and providing suitable support services. Similarly, in other regions including South Netherlands and Lombardy, it was evident to the Scottish delegation that a specific Industry 4.0 support intervention to encourage companies (particularly SMEs) to engage in Industry 4.0 activities was required.

Inspired by the learning from S34Growth OSDDs mentioned above, Scottish Enterprise has now brought forward its own Manufacturing 4.0 Service. We have not sought to replicate a particular model/activity we experienced during the OSDDs but have instead brought forward a new service that aligns to existing activity in Scotland. What we did learn was that Industry 4.0 can be relevant to companies of all sizes and in all sectors and the importance of starting them on their own individual journeys and this insight has been imbedded throughout the Service to ensure it is open to all and not ring fenced solely for specific sectors / types of company.

Without the learning and experiences of the S34Growth project this new support offering simply would not have been created and introduced in Scotland as our Industry 4.0 approach at the time (2016) was too high level and not resonating with the vast majority of the Scottish business base resulting in a lack of engagement.

It is anticipated that successful engagement with the new Industry 4.0 Service will not only bring through new internal practices but also better position Scottish companies to bring forward ERDF eligible projects in the future as well as encouraging inter-regional collaboration activity with likeminded companies abroad.

Scotland's Manufacturing 4.0 Service Explained

The new service is delivered through two interactions which provide the company with their own three-year roadmap for industry 4.0 adoption.

Firstly, a Manufacturing 4.0 diagnostic to identify current state of Manufacturing 4.0 readiness and future ambition. The diagnostic covers 37 Industry 4.0 opportunities across the following six themes:

- Business Strategy;
- Leadership & People;
- Capital Assets;
- Technology Enablers;
- Data Management; and
- System Integration.

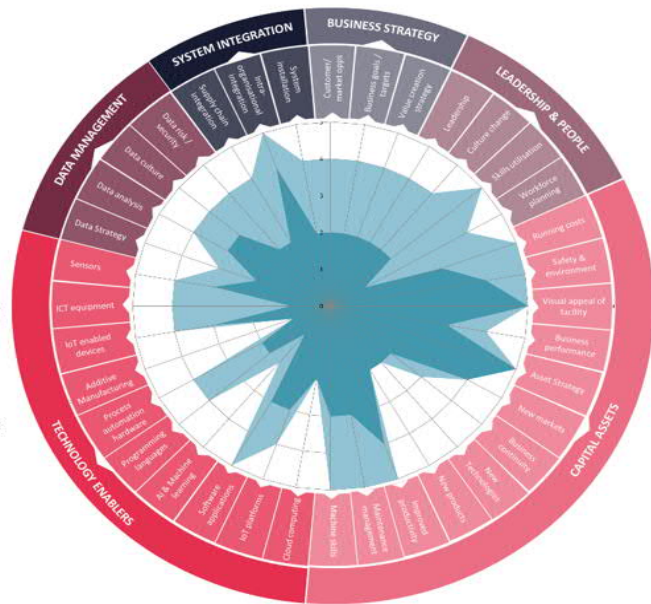
The draft tool

Current vs ambition radar chart

As part of the exercise, for each of the thematic areas and subthemes, participants will identify where is the company today in terms of their current level of maturity, and where do they desire to be?

This is done by aligning to a series of statements along the maturity scale in the diagnostic matrix

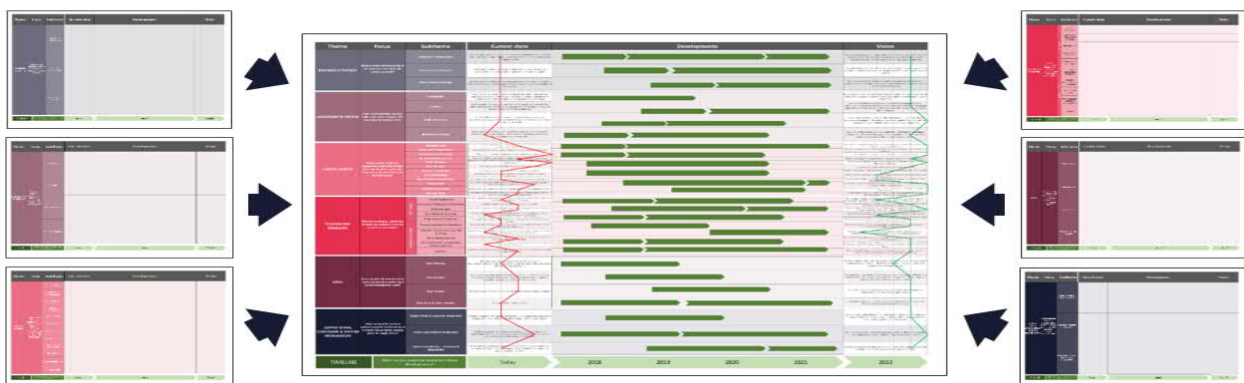
These answers will then automatically generate a 'Current state vs desired future state' radar chart



The second part of the service is to set forward the individual company 'journey' that will get companies from current position toward their future ambitions.

14.0 pathways roadmapping session

Each completed sheet will be patched together into a full A0 version



The pilot period of the Service has drawn strong interest from other S34Growth partner regions. The model has now been shared with stakeholders in Tampere who were keen to investigate if this could be replicated in their region. Should this be the case, there could be potential for inter-regional support in the future as companies evolve.

Action – Continue to deliver the Manufacturing 4.0 Service to Scottish companies and refine the tools through ongoing engagement and learning with S34Growth partners to embed good practice Industry 4.0 concepts and activities.

Scottish Enterprise will also share the Manufacturing 4.0 Service model with interested S34Growth partner Regions.

Scottish Partners: Scottish Government, Scottish Manufacturing Advisory Service, SE digital specialists. With linkages to Scotland's innovation centres and catapult network.

Potential Interregional Partners: Sharing of knowledge open to all S34Growth partners, with initial discussions having already taken place with Tampere and Catalonia.

Timeframe: Pilot activity occurred during 2018/19 with further roll out planned for 2019/20.

Costs: In recent years the SMAS budget has been c£500,000 per annum. We estimate implementation of this Service will be c50% of this per annum going forward - £250,000 .

Likely funding sources: Scottish Enterprise funding roll-out of Manufacturing 4.0 service in Scotland through SMAS mainstream budget.

Expected activities and impacts: Successful delivery of the service is expected to result in a number of quantitative and qualitative impacts including:

- 200 Manufacturing 4.0 company engagements/pathways
- New investments in innovations from manufacturing companies in Scotland.
- Increased collaboration with other EU Regions
- Mainstreaming of high end manufacturing across Scotland's S3 Programmes
- Increased confidence around Manufacturing 4.0 concepts and opportunities

Opportunities will be explored to connect the delivery of the service and the outputs from the Manufacturing 4.0 reviews to enhance use of the ERDF programme in future activity and investment in alignment with EU priorities. This will include but not be limited to R&D support, direct company support and joint calls.

RAP Action Two: International Innovation Partnerships

Background: Scotland is an entrepreneurial nation - a CAN DO place for new ideas, innovation and business growth. We have a proud tradition of sharing and internationalising our knowledge. We also have an inquisitive nature to learn from others. The industrial and societal challenges of Scotland are mirrored in other regions of the world. Regions working together and collaborating internationally is therefore vital.

Throughout the S34Growth project the partners have shared their interest in Open Innovation models and connecting companies/assets in their region to other partner regions. This has encouraged Scotland to explore with OSDD partners formalising International Innovation Partnerships around shared interests and international opportunities.

Action – Establish International Innovation Partnerships (IIPs) with selected S34Growth partners with aligned interests. Each IIP will detail joint commitments for future collaboration subject to a formal Memorandum of Understanding (MoU).

Each IIP to bring forward a programme of:

- Increased cooperation amongst partners in each region to jointly benefit and connect companies in each region through a series of trade shows, conferences, events etc;
- Co-investment in shared R&D / Open Innovation activities benefiting companies in each region; and
- Strengthening of international networks and cooperation beyond S34Growth / Brexit

Scottish Partners: Scottish Enterprise, Scottish Development International, Enterprise Europe Network and relevant cluster organisations.

Potential Interregional Partners: Catalonia and Tampere:

- Catalonia: Letter of Intent signed, and MoU currently being drafted to formalise IIP between Scottish Enterprise and ACCIO in Catalonia around a range of themes including Industry 4.0, SMART Cities, Mobility and Health Care;
- Tampere: Initial partnership dialogue held between Scotland and Tampere Region held in March 2019 to explore IIP model.

Timeframe: 2019 onwards

Costs: TBC once individual IIPs formalised. The initial joint call launched by SE/ACCIO in May 2019 has a budget of €2million. This is the first in what is anticipated will be a series of joint calls.

Likely funding sources: Future activity will be funded through a combination of partner organisation mainstream budgets. Opportunities will also be explored to connect IIP programmes and future activity with ERDF Operating Programmes in alignment with EU priorities.

Expected activities and impacts: Formal joint commitments likely to include a combination of:

- Promotion of Open innovation challenges
- Shared calendar of events
- Jointly planned learning journeys for companies to connect IIP regions;
- Sharing of pre-competitive public procurement calls around shared challenges;
- Collaborative R&D calls involving companies from IIP regions;
- Sharing learning to refine and inform the deliver of services in IIP regions.

RAP's Potential Influence on Scotland's Policy Instrument

Scotland's involvement in the S34Growth programme has centred on the Scottish ERDF Operating Programme. However, the future policy context at a UK/Scottish level will be determined by the outcome of ongoing Brexit negotiations. Nevertheless, Scottish Enterprise will continue to engage and contribute to discussions on future policy through existing networks and relationships. The actions in this RAP aim to strengthen these relationships by bringing forward a programme of inter-regional collaboration and activity.

Managing Authority Endorsement

The Managing Authority in Scotland (Scottish Government) has been involved in the S34Growth project from the outset as one of the main Scottish stakeholders. As a result, the MA has confirmed that they fully endorse the actions set out within this Regional Action Plan.