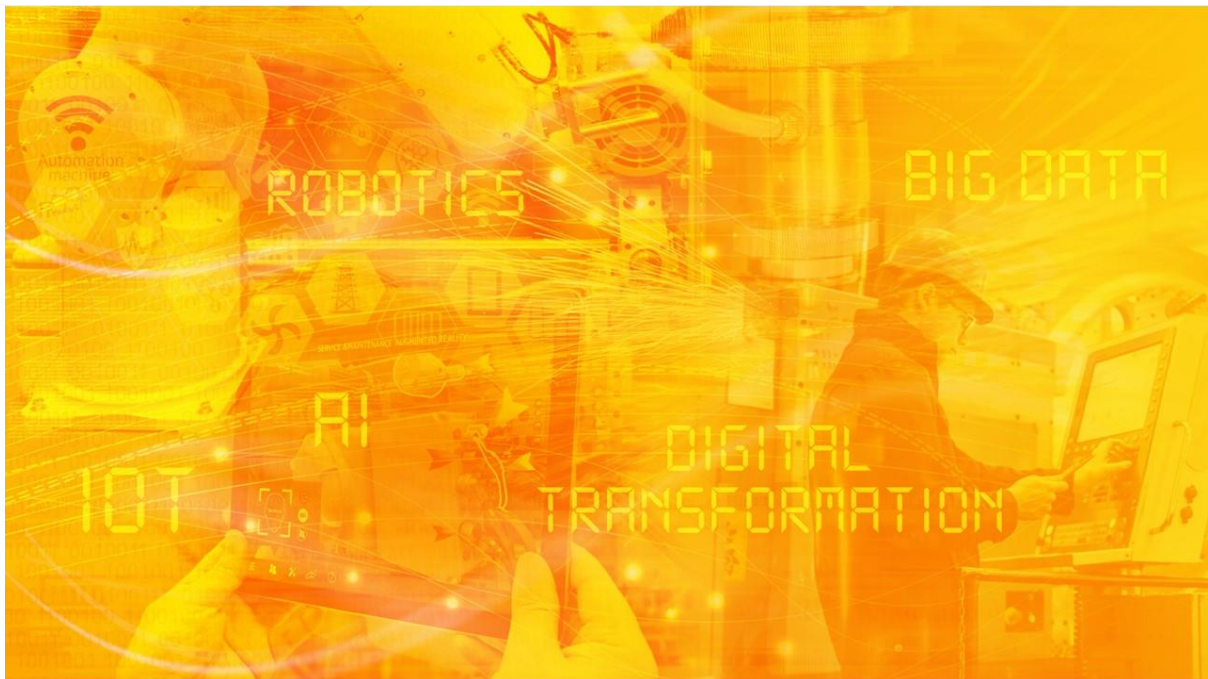


# ACTION PLAN

DIGITAL REGIONS: Regional policies adopting Industry 4.0 for their Digital Transformation

Region: Ireland: Border & Midland Region (BMW)



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## 2 Executive Summary

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The **DIGITAL REGIONS** project addresses how best to adapt innovation policies to support the manufacturing sector as a result of the emergence of Industry 4.0 (I4.0).

Its main objective is to increase the number of SMEs from manufacturing sector cooperating with other innovation actors in the participant regions to implement I4.0 solutions as a result of improved innovation policies.

The action plan seeks to address:

**Operational Programme:** The Irish Border Midland & Western Operational Programme 2014-2020

**Thematic Objective TO1:** Strengthening research, technological development and innovation.

**Investment priority 1b:** Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector.

Within this context, the project's action plan in the BMW region has identified the need to develop services that can create more effective linkages between I4.0 innovation agencies/applied research centres within the higher education sector to accelerate the flow of I4.0 technology to businesses in the region.

This is given urgency by the recent rationalisation of higher-level education delivery within the region into two universities as a result of the amalgamation of three institutes of a technology into a single "Technological University".

The action identified is that of regional capacity building to better develop the ability of manufacturing businesses to appreciate the business benefits of I4.0 and to develop an I4.0 strategy to introduce it into production and business operations.

## 3 General information

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- **Project:** DIGITAL REGIONS
- **Partner organisations:** ERNACT
- **Other partner organisations involved (if relevant):** NWRA, NUIG (university), ATU (University), Enterprise Ireland
- **Country:** Ireland
- **NUTS2 region:** Border Midland & Western Region
- **Contact person:** Margaret Quinn
  - **Email:** [margaret.quinn@ernact.eu](mailto:margaret.quinn@ernact.eu)
  - **Phone number:** +353.7491.68212

## 4 Policy context

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The Action Plan aims to impact:

- Investment for Growth and Jobs programme
- European Territorial Cooperation programme
- Other regional development policy instrument

Name and reference of the policy instrument addressed:

Border Midland & Western Operational Programme 2014-2020, specifically TO1, Strengthening research, technological development and innovation and investment priority 1b focused on promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector which specific objective is to increase the number of companies undertaking Industry R&D in the BMW region.

## 5 Action: Programme to assist manufacturing businesses build capacity for I4.0 transition

### 5.1 Background

**Action Challenge:** *The majority of SME's in the BMW region do not have the understanding or capacity in their senior management to appreciate the impact that continued evolution of I4.0 is having on the competitiveness, innovation potential and market position of their business and to have the capacity to respond to the challenge by forming an I4.0 strategy.*

Innovation on Industry 4.0 for manufacturing businesses is much less likely if senior management do not have a good understanding of its benefits and consequently do not build an I4.0 strategy and undertake exploratory steps and champion such innovation. Having that understanding and capacity to is a key for resilience particularly of SME's.

### 5.2 Knowledge applied from DIGITAL REGIONS

Describe in this section how you are applying the knowledge acquired and lessons learnt from the exchange activities in DIGITAL REGIONS, in the development of your action plan.

Partner experience and practice (please detail: service name, short description and location)	How this Partner practice has contributed to the services developed in your Action Plan (detail any transfers, full or partial of good practice)
<b>Digitalization Parkour</b> <b>Swiss Smart Factory, Berne</b> Consists of several, interactive demo stations, that help SMEs to explore and analyse new technologies in a tangible and practise-oriented way.	This is an effective way to show senior managers of manufacturing businesses what Industry 4.0 technologies can do to for their businesses and increase their understanding and appetite for I4.0 innovation.
<b>SAMT</b> <b>Spread of Additive Manufacturing and advanced materials Technologies</b> <b>Portugal</b> The project built co-operation & collaboration between enterprises, clusters and innovation actors such as R&D centres, higher education and R&D+I governmental & regional institutions for 3D printing/additive manufacturing	This good practice showed that a regional sectoral programme for SME's built on a related regional innovation ecosystem can be extremely effective to increase understanding and engagement on I4.0 innovation. It also highlighted the effectiveness of a regional programme with co-ordination & close collaboration of regional innovation actors on an area of high relevance to the region. The project was that of Plastics & Moulds but the approach and results are very relevant to any region needing to increase I4.0 innovation in their SME's.

### 5.3 Action/service description

<b>Main objectives</b>	<b>Value brought by this action into the region</b>	<b>Players involved and role in the implementation and collaboration between them (explanation of their involvement in service design)</b>
<b>Provide senior managers with the capability to assess options for introducing I4.0 solutions into their businesses and to build an I4.0 strategy.</b>	<i>Better understanding, resources and tools among managers to appreciate the impact that continued evolution of I4.0 is having on the competitiveness, innovation potential and market position of their business and the capacity to uptake I4.0 in a strategic way</i>	<p>NWRA ERNACT (Lead of the initiative) ATU: Technological University NUIG: University Enterprise Ireland: business development agency LEO: Local enterprise offices</p> <p>ETB: Training authority</p> <p>I4.0 innovation agencies in the region</p> <p>Manufacturing Clusters in the region</p>

The resources and tools for increasing the capacity of senior managers can be based on:

- Easy access to a repository of relevant and consistently structured case studies
- Sectoral peer learning workshops and events on a regional basis
- Capacity building on I4.0 project assessment, developing an I4.0 strategy and implementation guidance.
- Innovation programme on core I4.0 “quick wins” across a whole sector such as quality assurance, work-order automation.

The stakeholders in the project will include the regional I4.0 innovation actors who form the Digital Regions regional stakeholder group. Their involvement and collaboration will ensure effective implementation of the action and, in combination with regional manufacturing clusters, will constitute a digital innovation ecosystem for advanced manufacturing. ERNACT will provide project management and communications for the action. The regional innovation actors will collaborate to construct the programme and deliver it. Manufacturing companies will be involved via manufacturing clusters in the region, via the client base of each innovation agency and by outreach activities.

The programme to be delivered in the action combines technology diffusion, skills development for industrial transition and university-industry collaboration.

## 5.4 Timeframe and Funding

Project/Action Investment Line/Funding Source + Amount (please state each source of funding)	Submitted For Funding	Funding Decision	Project Start Date	Other key milestones
Proposal developed for new operational programme 2021-20127	Q2 2023	Q3 2023	Q4 2023	

## 5.5 Workplan

WP	Tasks
<b>Work Package 1 Project Management</b>	Task 1.1 Project Set-up & working group
	Task 1.2 Project execution: tasks & meetings
	Task 1.3 Reporting
<b>Work Package 2 Capacity building &amp; resources &amp; tools</b>	Task 2.1 Requirements gathering
	Task 2.2 Programme package definition
	Task 2.3 Development of resources
<b>Work Package 3 Programme delivery</b>	Task 3.1 Planning of programme
	Task 3.2 Programme Piloting/ Delivery
	Task 3.3 Programme Evaluation
<b>Work Package 4 Communications</b>	Task 4 Communications & dissemination

## 5.6 Budget breakdown for the service/project

To fund the action from 2023-2025:

Category of funding	Expenditure Amount
Salaries	120
Overheads (i.e. calculated at x % of staff costs)	40
Travel & Subsistence	45
External expertise	90
Promotional activities	12
Building/renovation / refurbishment	0
Equipment	100
<b>TOTAL</b>	<b>407</b>

## 5.7 Viability and sustainability

Once the programme has proved successful after the initial 2-3 years, the expectation is that it would be delivered and maintained by a regional training organisation or network from amongst the stakeholders.

## 5.8 Impact expected

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A. Indicator: % increase of manufacturing companies undertaking Industry 4.0 R&D in the BMW region:

B. This action is intended to increase the understanding and capacity of senior management in manufacturing companies on I4.0 impact and benefits and to enable them to build I4.0 strategies. Its impact is envisaged as increasing the number of businesses engaging on I4.0 in the BMW region, and undertaking I4.0 innovation projects as typically, senior management are key decision makers on new innovation undertakings. The action will also build on the regional stakeholder group of Digital Regions to create a regional innovation ecosystem for advanced manufacturing which in itself will strengthen the regions' capacity for industrial transition.

## 5.9 Monitoring activities in Phase 2

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The activities such as meetings with stakeholders and the regional authority and their outcomes, proposal development for funding occurring within Phase 2 of Digital Regions from 01/08/2022 to 31/07/2023 will be reported.



## ENDORSMENT of Digital Regions Action Plan from the Northern & Western Regional Assembly

On behalf of the Northern & Western Regional Assembly, I would like to confirm our support for the ERNACT Action Plan developed through the DIGITAL REGIONS project.

We agree, where appropriate, to promote and give assistance to the delivery and implementation of the projects and other activities as detailed in the Action Plan.

I confirm that I have the required authorisation of to do so and that the required authorisation process of has been duly carried out.

On behalf of:

Signed:  DocuSigned by:  
*David Minton*  
6565E00794A9467...

Name: David Minton

Position in Organisation: Northern and western Regional Assembly

Date: 7/14/2022

## 6 ANNEXES

### 6.1 Annex 1 - List of main activities and meetings with the local stakeholders

Activity/meeting	Date	Stakeholders involved	Issues addressed and main outcomes
<b>Meeting of RSG to review the results of the macro &amp; micro analysis across all Digital regions partners</b>	14 Jul 2020	ERANCT, Enterprise Ireland, Deferno, LEO Sligo, Sligo IT, Wisar Lab LYIT	The results of the regional assessment
<b>Presentation on project progress and highlighting of Good Practices</b>	25 May 2021	ERNACT, Wisar/LYIT, Futurecast/W8) Advanced Manufacturing training centre of Excellence Leo Sligo Data Value Hub Monaghan	Discussion around Action Plan Ideas and areas for consideration
<b>Progressing Action Plan Ideas</b>	Nov 11 2021	ERNACT LYIT Wisar/LYIT ETB Donegal Advanced Innovation in Manufacturing Centre, (AIM)Sligo Leo Sligo Sligo IT	Progress on Action Plan Ideas with ideas sharing and examples for potential initiatives

Activity/meeting	Date	Stakeholders involved	Issues addressed and main outcomes
		Advanced Manufacturing training centre of Excellence Data Value Hub Monaghan	
<b>Meeting with NWRA on Action Plan</b>	March 8 2022	NWRA, ERNACT	The policy instrument and influence and fit with Digital Regions
<b>Meeting with Regional Stakeholder Group</b>	June 10 2022	ERNACT, Leo Sligo, WISAR lab - Atlantic technological University (ATU) Letterkenny Campus, PEM -ATU Sligo Campus, Advanced Innovation in Manufacturing Supply Chain(AIM) ATU Sligo, Advanced Manufacturing Training Centre of Excellence (AMTCE),	Finalising the Action Plan