
Report to: Business, Innovation and Growth Panel

Date: 26 November 2019

Subject: **Innovation: Smarty Interreg programme**

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Purpose of this report

- 1.1 To update the Business, Innovation and Growth Panel on the Leeds City Region's participation in a European Union interregional cooperation project on Industry 4.0.

2. Information

- 2.1 The West Yorkshire Combined Authority (the Combined Authority), on behalf of Leeds City Region Enterprise Partnership (the LEP), has recently begun work on a European Union interregional cooperation project on Industry 4.0 (also sometimes referred to as the fourth industrial revolution – see box below). The “Smarty” project is a collaboration between regional government bodies and business research institutions from seven European regions with a focus on exchanging best practice on how policy can unlock the full potential of Industry 4.0. The Textiles Centre of Excellence, based in Huddersfield, are also a project partner and the Combined Authority will be working closely with the Textiles Centre of Excellence on regional coordination.

What will the project do?

- 2.2 The overall objective of the project is to trigger a policy change in the implementation of regional policies and programmes, increasing the awareness and adoption of Industry 4.0 solutions and technologies by Small and Medium Sized Enterprises (SMEs). In practical terms, the project consists of a three year programme of exchanging best practice, followed by a year of monitoring implementation of a targeted action plan in each region. During the first five semesters, partners will share examples both of policy and of direct interventions that relate to four themes, with the opportunity for the Leeds City Region to showcase examples from the region:

Industry 4.0

The concept of Industry 4.0 or the Fourth Industrial Revolution, sits at the heart of the UK's industrial strategy grand challenges. According to the [2017 Industrial Strategy White Paper](#):

“This fourth revolution is characterised by a fusion of technologies that is blurring the lines between the physical, digital and biological worlds. It will disrupt nearly every sector in every country, creating new opportunities and challenges for people, places and businesses to which we must respond.”

Although often applied to manufacturing, technologies of Industry 4.0 impact on the products, processes and supply chains in all aspects of industry. Across Europe, a number of national strategic initiatives are looking at how businesses can make the most of these opportunities: Industrie 4.0 (Germany), Industrie du Futur (France), Produktion 2030 (Sweden), Fabbrica Intelligente (Italy).

1. **Production Performance Monitoring Systems:** connecting demand and supply capabilities across specific Industry 4.0 landscapes where critical mass and cost sharing require enhanced collaboration;
 2. **Predictive modelling and maintenance:** development of ICT capabilities at design and production levels to optimise company processes by exploiting data analytics, big data as well as machine learning, predictive techniques and digital twins for more efficient production chains.
 3. **Virtual Reality and Simulation Technologies:** zero-defect and customized production techniques that use simulation techniques to substitute specific tests (thus limiting risks and costs of testing) and develop predictive models through further integration of virtual processing into the manufacturing process;
 4. **Smart logistics and network management:** multi-stakeholder supply chain management for value chain tracking and monitoring, brand protection, logistic hubs safety and fleet management.
- 2.3 The project will also produce reports and mapping on the current Industry 4.0 context in each region, and will culminate in each region committing to an action plan on how they will implement the best practice learned from partners. Each city region will also be responsible for establishing a local stakeholder group for the project which should bring together relevant partners. It is proposed that the Business, Innovation and Growth Panel could play a significant role in the leadership of this stakeholder group.
- What are the benefits for the Leeds City Region?*
- 2.2 Funded through the European Regional Development Fund (ERDF), Interreg projects are aimed at supporting regional and local governments across Europe to develop and deliver better policy. Therefore, as a city region we will be able to benefit from participating in the Smarty project in a number of ways:
- Provide opportunities to showcase best practice in the Leeds City Region on industry 4.0

- Learn from other regional partners in terms of what works on policy and interventions
- Align strongly with the work of the Leeds City Region digital framework and local industrial strategy
- Provide a framework for engaging with regional partners on what industry 4.0 means for our economy and citizens
- Build collaborative partnerships with regions within Europe that could lead to further opportunities

2.3 The project aligns strongly with the regions new Digital Framework, particularly the ‘digital opportunities for all businesses strand’ and will help inform and determine future interventions through the Local Industrial Strategy.

Next steps

2.5 Before January 2020 a number of initial tasks will need to be completed by each project partner:

- Establish a stakeholder group for the project in the city region and identify relevant partners to involve
- Complete an initial Industry 4.0 mapping and context investigation
- Agree on a number of best practice case studies to share on the first theme
- Communicate details of the project and set up local dissemination channels

3. Financial implications

3.1 The Smarty project is funded by Interreg Europe through the European Regional Development Fund (ERDF). The Combined Authority has been allocated a budget of €90,000 of which 85% of eligible spend will be reimbursed by Interreg Europe, with the remaining being contributed through staff time and related minor travel expenses.

4. Legal implications

4.1 There are no legal implications directly arising from this report.

5. Staffing implications

5.1 Eligible staffing costs are included in the allocated budget for the project. Those members of staff involved in the project will have a declared percentage of their overall time allocated to the project.

6. External consultees

6.1 No external consultations have been undertaken.

7. Recommendations

- 7.1 That the panel discusses the update provided on the Smarty project and the opportunities it offers for the City Region.
- 7.2 It is recommended that the panel agree to act as the principle stakeholder group for the project, and that a working group be established to include key BIG Panel members and other key stakeholders.

8. Background documents

- 8.1 None.

9. Appendices

- 9.1 None