# Public Consultation to inform Ireland's new National Digital Strategy

1. Please give your name and organisation if applicable (your personal details will only be used for verification purposes)

> Richard Manton, Deputy Registrar & Policy Officer, Engineers Ireland
>
> rmanton@engineersireland.ie

2. What are the most important areas the Strategy should focus on? (please pick a maximum of three)
   - ☒ Digital Infrastructure
   - ☐ Trust, Security and Privacy
   - ☐ Inclusion and Wellbeing
   - ☐ Digital Public Services
   - ☐ Data Sharing
   - ☒ Innovation and Growth
   - ☐ Labour Market Changes
   - ☒ Education and Skills
   - Other (please specify)

> Engineers Ireland's policy statement on Industry 4.0 (available here: http://engineersireland.ie/EngineersIreland/media/SiteMedia/communications/publications/Engineers-Ireland-Industry-40-Policy-Statement.pdf?ext=.pdf) highlighted the need for national action to prepare Ireland for Industry 4.0 and ensure that our manufacturing base survives and flourishes in the future providing high-value employment and growing exports.
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> Our recommendations are also highly relevant for Ireland's new Digital Strategy. The most important areas are:
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> - Awareness of digital transformation and collaboration
> - Education and re-skilling employees
> - Measures to support RD&I and capital investment required by manufacturing companies
> - Co-ordination and collaboration of activities across the national response

3. What are the main opportunities and challenges of digital transformation for Ireland?

> As the digital transformation of manufacturing continues to be rolled out and implemented, suppliers will become fully integrated into global supply chains of their customers (digitalisation), new production technologies (Additive Manufacturing, Ro- and Co-botics, Virtual, Augmented and Mixed Reality) will become commonly used and manufacturing processes will benefit from application of digital technologies. In turn, this will lead to demands to re-train and up-skill employees in order to secure and grow Ireland's manufacturing base by creating greater value-added services.

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Digital transformation will offer significant opportunities for the manufacturing sector in Ireland, including, the development of new product and service offers (supported by our research performing organisations (RPOs)), increased organisational efficiencies, new business models, increased profitability and export led growth. But Industry 4.0 should be a cause of concern to policy makers both in Ireland and on mainland Europe. This includes the slowing pace of global economic growth, in particular the slowdown in trade, in parts and components and the trend of re-shoring traditionally labour-intensive activities – the latter being enabled through cost savings and flexibility realised through implementing new manufacturing technologies.

4. Is there anything stopping you as a citizen from using more digital technology in any aspect of your life?

**Connectivity:** Connectivity is a cornerstone of digital technology and Engineers Ireland strongly welcomes the Government's commitments made under the National Broadband Plan and, more recently, DCCAE signing the 5G Declaration for Europe. For citizens to realise the full potential of digital technology, reliable and secure connectivity (5G, wifi, etc) is required across the country.

**Awareness:** There is an imperative for strategic awareness by citizens and companies to be enhanced in order to use and apply digital technologies in an efficient way. Individual companies must determine for themselves how best to address their strategic goals by taking the initiative to pilot a system or adopting a system in response to market pressures – maintaining competitiveness or responding to the needs of their customers as part of a global supply chain. For other organisations implementing a comprehensive lean approach will be sufficient but many will have to implement aspects of Industry 4.0 to varying degrees.

5. What supports do communities and businesses need to benefit fully from the use of digital technology?

**Measures to support RD&I spend and capital investment in Industry 4.0:**

• Legislation should be introduced to allow for the maximum level of funding for national R&D support schemes in line with published State Aid Rules limits.

• Strategic Banking Corporation of Ireland operational practices should be reviewed to ensure competitive terms are available to industry in Ireland and the State should consider establishing a loan scheme similar to that provided by "bpifrance", Finnvera, AWS (Austria) or KfW (Germany).

• Further to the above, a review should be carried out of the increasing number of supports (both new and revised existing mechanisms) available through the European Commission sponsored programmes, to ensure that industry in Ireland is deriving maximum value from same.

• The Department of Finance should consider introducing a system of accelerated depreciation of capital equipment related to implementing an Industry 4.0 strategy, as per the Italian model, to further support SME investment in new technologies and practices. In many cases these investments will be critical to industry remaining internationally competitive.

6. What do you see as the main benefits and barriers to using online Government services?

**Benefits**: cost efficiency, accessibility (time and space) of services, and visibility of services

**Barriers**: lack of broadband access in some rural areas, lack of awareness and/or digital literacy

7. If you have any additional thoughts or comments, please include them here.

**Education and re-skilling employees:**

With the increasing use of technologies, digital transformation will create new jobs, but it will also eliminate old ones – mostly unskilled ones. Digital transformation will lead to demands for higher-skilled jobs with increased contribution to existing value chains. It is critically important that we now start to develop the correct combination of skills, knowledge and competences. We recommend:
• Develop education programmes on new areas in digitalisation
• Include data capture, analytics and critical evaluation in degree programmes
• Establish a structured Industry 4.0 SkillNet

**Co-ordination and collaboration of activities:**

It is critically important that Ireland is not losing opportunities through duplication of effort across RPOs or, indeed, missing opportunities for collaboration. Securing Ireland's manufacturing future is becoming ever more important as the level of investment is increasing and spread over many RPOs. We recommend:
• Increase collaboration between research performing organisations
• Agree mechanisms of collaboration between Enterprise Ireland, IDA, SFI and industry consortia
• Manage the co-ordination of national efforts through the Technology Centres

Engineers Ireland's policy statement on Industry 4.0 is available here:
http://engineersireland.ie/EngineersIreland/media/SiteMedia/communications/publications/Engineers-Ireland-Industry-40-Policy-Statement.pdf?ext=.pdf