



Ibec
For Irish Business

Completing a digital single market that works

Ibec views on
completing the
European digital
single market
strategy

2018



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“ A digital single market where policy makers understand and respond to the needs of business is more important than ever for innovation, growth and jobs.”

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Our vision for a digital single market

A digital single market where policy makers understand and respond to the needs of business is more important than ever for innovation, growth and jobs. Europe needs an accessible, secure, outward looking single market that embeds and encourages digitalisation as an enabler of greater connectivity, innovation, investment, global competitiveness, growth and greater choice in goods and services.

The objective of this paper

This paper takes stock and presents Ibec recommendations to EU policy makers on the ongoing implementation of the European Commission's strategy for a digital single market (DSM)¹. The paper expands on Ibec's preliminary views on the creation² and early implementation³ of a European DSM strategy and Ibec's ambition for advancing Ireland as a leading, globally competitive digital economy^{4,5}. This paper focuses on the future implementation of the DSM strategy after its recent mid-term review in May 2017.

The paper is necessarily a priority list rather than an exhaustive list. We believe that, taken together and pursued with vigour, these priorities will enable business to create jobs and prosperity in Ireland and across the EU.

1. The Commission's DSM strategy was published on 6 May 2015.
2. Ibec (2015) A digital single market that works
3. Ibec (2016) Implementing a digital single market that works
4. Ibec (2016) Can Ireland take a bigger byte?
5. Ibec (2017) Accelerate Ireland's Digital Economy - Recommendations for advancing Ireland's digital economy through the Action Plan for Jobs, 2018

Introduction

The Irish writer and innovator, George Bernard Shaw observed that “Progress is impossible without change, and those who cannot change their minds, cannot change anything”. Advances in the use of digital tools and data is bringing about change that can enable economic and societal benefits. We need new policy thinking to realise these benefits. In May 2015, the European Commission outlined a strategy that made digitalisation a key priority for the single market. Ibec welcomed the publication of that strategy but its ultimate success must be measured by economic growth and job creation across Europe. More than two years on, Ibec takes stock and outlines its priorities in the ongoing implementation of the digital single market.

A balanced EU policy framework that harnesses the full potential of digital will bolster the European single market to bring economic and societal benefits. An effective digital single market framework should:

- Enable our businesses to: enhance productivity; further invest; innovate; access new markets and compete globally – providing economic growth, job opportunities and a greater choice in goods and services for citizens.
- Enable the public sector to: enhance its productivity and efficiency; use digital tools to address broader policy challenges; and better connect with businesses and citizens.
- Provide European citizens with: jobs; opportunities to start their own business; opportunities to improve work-life balance; greater connectivity; better healthcare and greater choice in new and innovative goods and services.

The rate of technological and behavioural change in our increasingly digital age can often outpace policy and regulatory processes. Therefore, EU policy makers need to develop and implement a flexible, outcome-based policy framework that sets clear thresholds for market intervention, avoids undue regulatory burden or obsolescence and unlocks the positive potential of a digital economy for businesses and consumers alike. This approach must recognise the global nature of digital and remain open to the principles of innovation, competition and free trade.

An effective digital single market matters more than ever

Implementing a complete digital single market matters to Europe and Ireland in terms of enhancing efficiencies in our infrastructure and public administration, and the opportunities it provides our businesses to invest, enter new markets, grow and create jobs. It will enable business to provide new and improved goods and services to customers. With growing global competition, our shared ambition must be to lead in every aspect of digital readiness.

Digital economic development – a shared opportunity for Europe and Ireland

The use of digital technologies and data permeates the broader economy and can be leveraged to enhance efficiencies in our infrastructure⁶, in public administration for citizens⁷ and to enable business to compete, invest, grow and create jobs. Economically, digital technology can boost productivity, reduce transaction and information costs⁸, and enable completely new and innovative services.

Ireland's digital economy is estimated to be worth 6% of GDP or €12.3 billion – a value that has increased 39.3% in the period 2012-2015. The digital economy is estimated to be 5.7% of EU GDP and 5.3% of G20

GDP⁹. Ireland has a strong tradition and success in attracting global digital companies and developing a growing indigenous technology sector (*see Figures 1 and 2*)¹⁰. This success could leverage new investment in emerging technology strands and the creation of new cross-sectoral digital ecosystems in Ireland and across Europe.

Digital development can also be a tool for marketing, connecting people, supporting innovation and value chains, including an 'App economy' in the EU that is estimated to support 1.8 million jobs¹¹, including 15,000 jobs in Ireland, 330,000 jobs in the UK, 311,000

6. Digital technologies and data can be used to complement broader policy decisions and enhance efficiencies in our transport, energy, education and health systems, see: <https://ec.europa.eu/digital-agenda/en/smart-cities>.

7. EPRS (2015) The use of digital by public bodies can reduce costs of public administration by 15-20%. A digital by default strategy in the public sector in the EU could result in around €10 billion of annual savings. [http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/565890/EPRS_IDA\(2015\)565890_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/565890/EPRS_IDA(2015)565890_EN.pdf)

8. World Bank (2016) World Development Report 2016 – Digital Dividends; and World Economic Forum; WEF (2015) The global information technology report.

9. DCCAE (2016) Assessment of the macro-economic impact of the internet/digital on the Irish economy, commissioned by the Department of Communications, Climate Action and Environment and prepared by Indecon.

10. IDA (2017) <http://www.idaireland.com/business-in-ireland/industry-sectors/ict/>

11. The PPI estimate that a 15% growth over the last 12 months.

12. Progressive Policy Institute – PPI (2017) The App Economy Jobs in Europe – Leading Countries and Cities (October, 2017)

Figure 1
Digital's place in Ireland



The proximity of leading edge sectors and talent in Ireland gives us a comparative advantage and opportunity in leveraging the benefits of digitalisation.

The office of Ireland's data protection commissioner has significant resources, with a budget of €11.7 million.



Ireland has a Minister dedicated to the Digital Single Market (DSM) and Data Protection

Ireland's digitally-intensive sectors*:

Employ **212,000 (10.6%)** of Ireland's workers



Account for **€30 billion** GVA in Ireland's economy and **26%** of its exports



* Data: Technology Ireland and Frontier Economics (2017)

jobs in Germany and 260,000 jobs in France¹². The European Commission is more than midway through the implementation of its digital single market (DSM) strategy¹³. An effective DSM framework could create up to €415 billion in additional growth to Europe's economy – both by enhancing the existing single market and as a potential vehicle that enables trade in the global digital marketplace. Ireland and

other northern European 'digital frontrunners'¹⁴ have been identified as countries that could benefit from an accelerated development of the European digital economy (see Figure 2). For Ireland an effective DSM and full adoption of digital technologies could be leveraged to add €27 billion to our GDP and have a positive net effect of up to 140,000 jobs by 2020¹⁵.

Our shared ambition must be to lead on digital development

Quantitative research shows that Ireland is making progress and compares favourably in certain aspects of international digital development (see Figure 3). The European Commission ranks Ireland above the EU28 average in a cluster of high performing member states¹⁶ and 8th in terms of overall digital performance across the EU¹⁷. Quantitative evidence¹⁸ shows that the top European performers are performing well internationally across many indicators of digital development but that European countries combined are not on a par with global top performers.

The EU and Ireland face increased global competition, notably from Asia, which is undergoing rapid digitalisation^{19,20}. In addition, some research indicates the need for top European performers to maintain the momentum on their digital development or risk losing ground²¹. The challenge of maintaining competitiveness in a digital era is not unique to Ireland or the broader EU, but our shared ambition must be to work together to lead in every aspect of digital readiness. An effective digital single market would mean that European countries combined would be on a par with global top performers in digital. To do this, Ireland and the other member states must show leadership by developing their national digital agendas and working together²² with the EU institutions to ensure Europe develops an effective digital economy that can compete globally, generating economic and societal benefits for its citizens. Ibec and its members are willing to work with all stakeholders on these shared objectives.

It is acknowledged that the European single market is still incomplete. The EU needs a policy framework that breaks down remaining barriers and unlocks the greater potential of a digital economy for our businesses and citizens.

Developments in technology can drive changes for businesses, consumers and policy makers alike. How policy makers react to these changes must be carefully considered to maximise the positive outcomes for our businesses' and citizens' welfare. Some stakeholders may even see digital as a threat and seek to implement policies aiming to protect established industries or business models. This would be a serious mistake. The shift to digital cannot be reversed – it may be possible to delay or frustrate it temporarily, but only at the cost of killing European innovation and competitiveness. Regulation that inadvertently inhibits innovation or competition will prevent the realisation of opportunities presented by a digital single market for consumer choice, jobs and growth. Care must be taken to ensure that the proposed policy framework does not remove national barriers to businesses and consumers in the single market, only to inadvertently replace them with a supra-national barrier.

13. European Commission (2017) Communication on the Mid-Term Review on the implementation of the Digital Single Market Strategy COM (2017) 228 final

14. BCG (2016) Digitizing Europe – Why Northern European frontrunners must drive digitization of the EU economy. Ireland, the Benelux countries, Denmark, Sweden, Finland, Norway and Estonia have been identified as digital front-runners. The frontrunners typically have relatively small populations and are well digitized, innovative and export driven.

15. BCG (2016) Digitizing Ireland – How Ireland can drive and benefit from an accelerated digitized economy in Europe.

16. The cluster also includes Denmark, Finland, Sweden, the Netherlands, Luxembourg, Belgium, UK, Ireland and Estonia

17. European Commission (2017a) DESI 2017 – Ireland; European Commission (2017b) Europe's Digital Progress Report (EDPR) 2017 Country Profile Ireland.

18. From both the European Commission and WEF

19. European Commission (2016) International Digital Economy and Society Index (I-DESI) and European Commission (2017) Commission Staff Working Document (2017) 155 (10 May 2017)

20. BCG (2016) *ibid.*

21. The Digital Evolution Index (2017) The Fletcher School, Tufts University in partnership with MasterCard.

22. For example, Ibec supported the joint Ministerial letter to the European Council, June 22, 2017 regarding the DSM.

Figure 2
Ireland's contribution to a digital Europe

Ireland is home to a strong indigenous technology sector and:

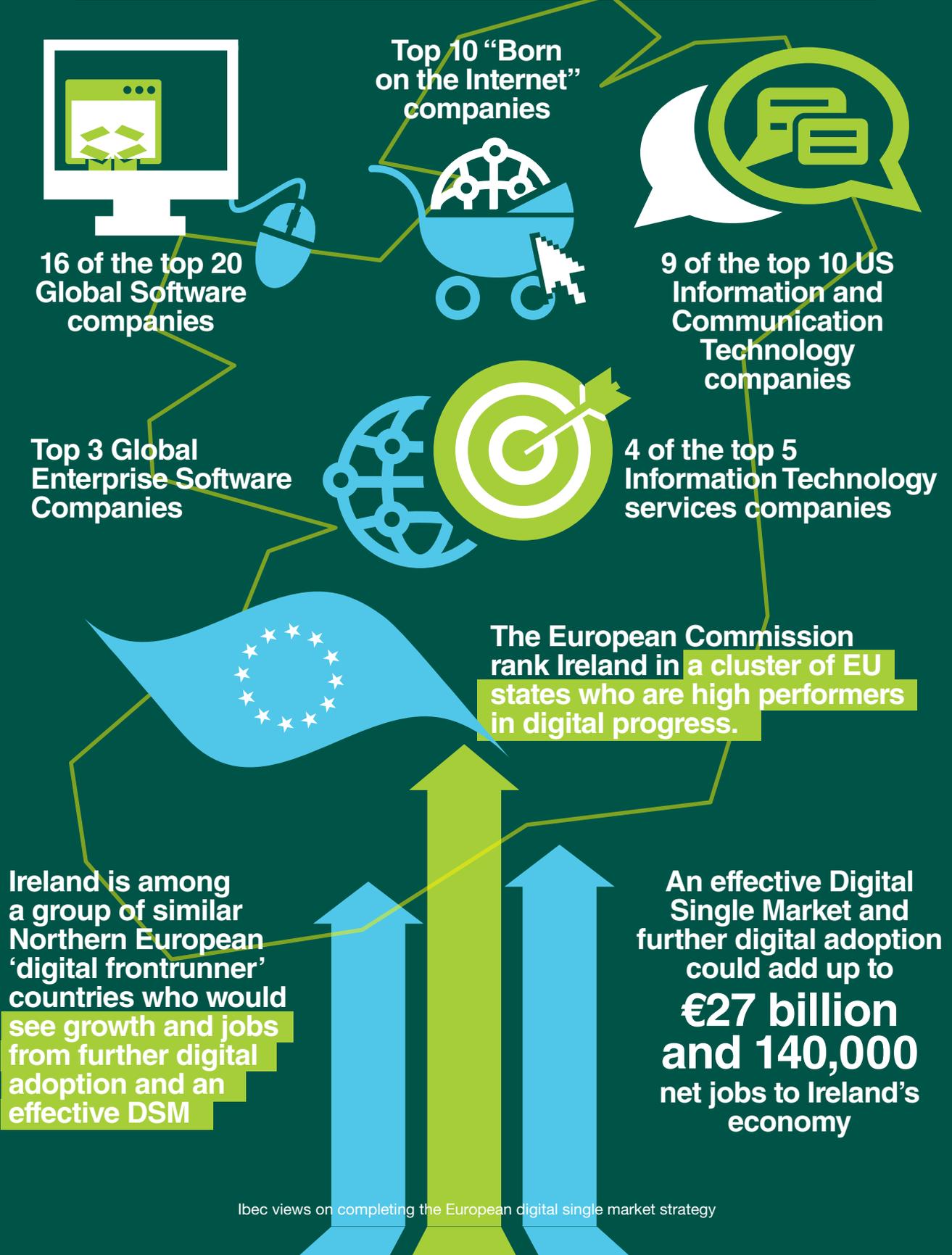
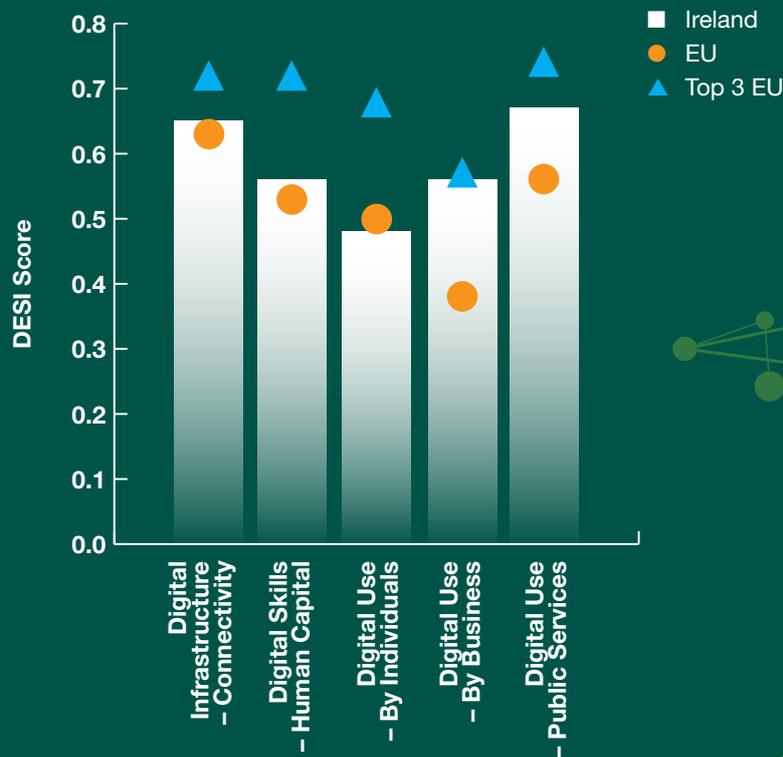


Figure 3
EU Digital Economic and Society Index – (DESI) 2017



Data: European Commission, 2017

“Ireland is making progress and compares favourably in certain aspects of international digital development.... but our shared ambition [in the EU] must be to work together to lead in every aspect of digital readiness.”

Ibec's priorities for completing the digital single market

1. Improve access to digital goods and services

The implementation of the digital single market strategy must enable investment, trade and growth by encouraging continued investment in quality digital content for consumers; and encouraging e-commerce by boosting awareness of its benefits and cutting red tape.

Encourage e-commerce by boosting awareness of its benefits and by cutting red tape

Geoblocking²³

EU policy makers should:

- Address unjustified discriminatory practices. However, geo-blocking, may arise for several reasons including: diverging rules imposed across member states; a divergence in market conditions or cultural and consumer tastes; and the economic viability of delivering certain products and services across borders. Geo-blocking may not be caused by companies but by deficits in the implementation or interpretation of single market rules at member state level across the EU (e.g. lack of mutual recognition, lack of harmonisation or diverse interpretation and application of EU law).
- Not force companies to sell across borders at any cost but rather to identify and address the underlying reasons behind barriers to entry for businesses and consumers. The EU should also address remaining deficits in the implementation or interpretation of single market rules at member state level across the EU.
- Exclude business to business from the scope of proposals to maintain contractual freedom.
- Clarify 'applicable law' in the proposal.

23. A measure to limit or block access to product or service or somehow discriminate on the nationality or residence of a consumer.

Ibec's priorities / continued

Digital content

EU policy makers should:

- Continue harmonisation approach to provide certainty to business.
- Avoid overlaps or potential conflict with existing rules on consumer rights and the General Data Protection Regulation (GDPR).
- Limit the scope of proposals to digital content or services supplied in exchange for money. Alternatively, if 'data as a counter-performance' is to be covered by this proposal, the rules should be limited to personal data. To do otherwise presents risks to innovation and consumer choice e.g. app development.

Distance sale of tangible goods

EU policy makers should:

- Avoid fragmentation of internal market rules, from the inadvertent creation of a dual system of rules for online and offline transactions

Encourage continued investment in quality digital content for consumers

EU policy makers should:

- Ensure EU copyright rules strike a proper balance between intellectual property rights and the further development and provision of innovative services in the digital economy. Text and data mining is an evolving area in digital analytics and innovation. Clarifying that lawful access to the right to read includes the right to mine could bolster analytics-based research and innovation across Europe, with no impact on publishers since companies would continue paying for licences to access content.
- Balance the rights of creators with rights of others including users and those that benefit from mandatory exceptions.
- Ensure the system of publishing rights does not deter the communication of news, obstruct online licensing or negatively affect authors. Proposals for the creation of new neighbouring rights for press publishers at EU level seem inappropriate given the impacts of similar proposals in Spain and Germany. We encourage the development and use of innovative technological solutions that help reduce copyright infringement and increase the control of rightholders over the use of their content online.
- Ensure proposals do not undermine liability provisions and the prohibition against general monitoring in the E-Commerce Directive (2000/31/EC) or the Charter of Fundamental Rights.

2. Enable investment in quality digital networks and services

A robust infrastructure is the backbone of the digital economy. The implementation of the digital single market strategy must enhance access and connectivity for business and consumers. Ensuring competition and the right incentives will enable investment in high quality and secure digital infrastructure²⁴ and services. A strong digital single market and a strong telecoms single market go hand in hand. Europe needs a pro-investment climate. We must also ensure an environment that adequately protects personal data and IP, while providing an effective framework to invest in innovative digital products and services.

Unlock investment in digital infrastructure to improve access and connectivity

Ubiquitous connectivity and access to resilient, high speed, high quality networks are the foundations for the digital economy. The roll-out of 5G in Europe, and its potential to enable new applications and services, will be dependent on creating the right environment. An updated regulatory framework for electronic communications is essential – encouraging investment, innovation and competition.

EU policy makers should:

- Encourage private sector investment in high speed broadband networks and digital infrastructure.
- Develop a more effective regulatory framework to reflect industry convergence.
- Promote a consistent single market approach to spectrum policy and management.
- Tackle regulatory fragmentation to allow economies of scale for efficient network operators and service providers, and for the effective protection of consumers i.e. develop appropriate and proportionate regulation in areas with infrastructure competition.
- Ensure a level playing field amongst players that offer the same service based upon an evidence based approach²⁵.

24. Infrastructure that enables the digital economy, including a spectrum of network, compute and storage functions required for the successful delivery of digital applications and services e.g. high-speed broadband, data centres, hardware and software etc.

25. The digital market structure has dramatically changed, making it possible to provide an increasing number of services by different actors. Accordingly, new digital products and services have appeared, with sometimes different rules applying to players offering comparable services. Currently, telecoms sector-specific rules add to horizontally applicable rules. This makes it necessary to establish a level playing field amongst players that offer the same service. Whether services are the same, which obligations should apply and why, should be soundly assessed and any outcome should not hinder either innovation or consumer benefits. The new telecommunications regulatory framework should ensure a level playing field, where applicable, irrespective of the nature of the service provider, with downsized and futureproof regulatory solutions fostering innovative services.

Enable investment in secure digital innovation

Data is an important economic and social resource. The privacy, security and resilience of digital infrastructure and services are important aspects in enabling digital uptake, innovation and benefits in the economy.

Data protection

The General Data Protection Regulation (GDPR) was adopted in April 2016 and will become applicable in Member States in May 2018 – Member States will also be required to transpose aspects of the GDPR into national law. As a follow-up, European policy makers are discussing a proposed ePrivacy Regulation (ePR).

The international flow of data is essential to innovation, economic growth and jobs in both Europe and the U.S. A resilient data protection framework underpins a competitive digital economy. The welcome adoption of the EU-US Privacy Shield agreement in 2016 is vital to both shared objectives. The work and strong debate that forged the agreed Privacy Shield is welcome. Privacy Shield enhances legal certainty for businesses on both sides of the Atlantic, while providing safeguards for EU citizens' data. The in-built joint review mechanism in Privacy Shield can only make it a more dynamic and resilient framework over time. The European Commission's first annual review, completed in October 2017, examined the functioning of the EU-US Privacy Shield and suggested areas of further improvement. The review recognised that the Privacy Shield continues to ensure an adequate level of protection for personal data transferred from the EU to participating companies in the US.

EU policy makers should:

- Ensure the implementation of the new data protection (GDPR) regime fosters innovation in data-use while protecting the fundamental rights of citizens and boosting consumer confidence.
- Ensure that the new GDPR regime fully embodies the principle of the single market by avoiding potential fragmentation pitfalls in the implementation and the enforcement of the rules i.e. ensure a balanced approach to sanctions for data breaches, ensuring proportionality to the damage incurred.
- Ensure the implementation of the new GDPR regime fosters a structured, sustained and effective engagement between national data protection authorities, business and civil society both in member states and across the EU.
- Ensure the ePR aligns and complements other EU legislation and does not undermine regulatory

certainty or investment made in anticipation of GDPR implementation. Communications confidentiality is about the protection of messages in transit. Extending the scope of ePR beyond this to cover data at rest will confuse application of the ePR and GDPR.

- Ensure the ePR does not undermine parallel EU objectives to promote the digitalisation of the economy, specifically:
 - Delete references to communications as an ancillary service from this proposal - It will only lead to greater burdens being placed on services that do not offer electronic communications as a primary part of their business model, but as a component to enable their primary service to function. This will adversely impact a great number of applications and services from event schedulers to online gaming and photo editors to mobile banking. At a minimum more clarity is needed to determine the scope of the proposal and which stakeholders are covered by it. A level playing field should be found between those stakeholders offering the same service.
 - Delete references to machine-to-machine (M2M) communications from the proposal. The scope should be at least narrowed to expressly exclude industrial, B2B and non-end user applications. M2M communication often excludes personal data. If data in these communications included personal data it would be subject to the GDPR, more reason not to create legal uncertainty through overlapping legislation. The current proposal negatively impacts the realisation of Industry 4.0 and discourages ongoing digitalisation of industry - contrary to a parallel European Commission objective under the DSM strategy.
- Ensure a thorough assessment of the current ePR proposal and meaningful consultation with stakeholders to fully understand and evaluate its impacts.
 - The objective should not be 'to apply' the current proposal by May 25, 2018 but rather deliver a considered, practical and workable regulation that delivers both legal certainty and an effective digital single market for stakeholders.
 - The ePR should set a realistic timeframe for adoption and implementation - organisations will need sufficient time to comply once the ePR text is officially adopted.

Cybersecurity

Member States are currently implementing and transposing the Network and Information Security (NIS) Directive that was adopted in July 2016. On 13 September 2017 the European Commission adopted a cybersecurity package, including a proposed Cybersecurity Act (CSA) to further improve EU cyber resilience and response. Ibec supports efforts to develop national and European cybersecurity capacities.

EU policy makers should:

- Work with member states to ensure the implementation and enforcement of the NIS Directive follows better regulation principles – the Directive indicates a risk based approach that distinguishes OESs and DSPs. National transposition should recognise existing international and industry standards and avoid technology mandates. The Directive aims to be a harmonising legal instrument across the EU. Therefore, national transposition should not seek to gold-plate the Directive's requirements for DSPs (or OESs) and avoid a fragmented approach that adds to the cost of ensuring compliance.
- On the proposed Cybersecurity Act (CSA):
 - Ensure ENISA continue to support Member States as they develop their cybersecurity capacities.
 - Develop and enhance Europe's cybersecurity framework using the following approach:
 - A proposed European framework to determine the need for certain cybersecurity certification schemes could be beneficial if it is voluntary, specific, relevant and supports the functioning of an effective DSM, specifically:
 - The framework should be voluntary. The benefits of each scheme should be tried and tested before any mandatory market access rules are put in place for certain products and services.
 - ✓ The voluntary nature should not be indirectly altered in practice by public procurement. All sectors should be encouraged to carry out and disseminate, where relevant, certification practices in relation to their specific technological areas.
 - ✓ When certification is deemed necessary, each scheme must determine whether self-certification, third party certification or a possibility to use both is required.
- ✓ When pan-EU initiatives are not deemed beneficial, national initiatives should be aided through mutual recognition.
- ✓ Certification schemes should balance the desired level of security and the costs that business, particularly SMEs, may face.
- ✓ The certification framework or schemes it produces must be fully consistent with other European legislation e.g. GDPR and NIS Directive.
- No rigid one-size fits all certification scheme can apply to all current or future connected technologies or the potential risks they face. Different approaches are required for different products, services and systems. The framework should take a bottom-up approach – (a) recognise how various sectors and businesses understand, identify, assess and alleviate cybersecurity risks; and (b) focus on achieving the desired outcome through formal and meaningful collaboration between ENISA, industry and national authorities.
- The framework and the schemes it produces should remain globally relevant in the context of cybersecurity threats and practices. Europe should continue to work with like-minded international partners in developing and supporting industry-led voluntary global technical standards in an open, transparent and consensus-based manner. Such co-operation can enhance security and interoperability while avoiding duplication or fragmentation.
 - Ensure cybersecurity is not deliberately weakened for national security. 'Backdoor proposals' for national security requirements can undermine the whole cybersecurity ecosystem. Security, privacy and innovation must be balanced.
 - Increase user awareness and education on cybersecurity risks and digital hygiene to support the development of the DSM. Cybersecurity is a shared ambition and requires collective action on the part of policy makers, regulators, industry and users.
 - Explore policy avenues that counter industrial intellectual property theft.
- Consider the use of cohesion funding to support Member States in the development of their cybersecurity capacities.

Leverage online platforms for further economic and societal benefits

Online platforms cover a wide range of activities²⁶ and are acknowledged by the European Commission to be proven drivers in supporting innovation and growth in Europe's digital economy²⁷. Platforms can also enable users, objects and devices to connect and communicate – enabling an environment for internet of things (IoT) solutions. The European Commission's mid-term review of the DSM strategy undertook actions to look at platform-to-business relationships²⁸ and mechanisms to tackle illegal content – on September 20, the Commission issued guidance on tackling illegal content online²⁹.

Ibec continues to believe that an effective DSM must leverage online platforms for further economic benefits and that we must encourage further digital adoption and e-commerce by boosting awareness of its benefits and by cutting red tape.

EU policy makers should consider the following principles:

■ Online platforms and digital adoption by SMEs are both important to growing the digital economy:

- The European Commission and business users acknowledge the importance of platforms as intermediaries bringing together economic actors and fostering innovation in the digital economy. Small and Medium Enterprises (SMEs) have an enormous potential for employing digital technologies to boost their productivity, access new markets and grow. Platforms can enable SMEs to:
 - grow their businesses by lowering barriers to entry, facilitating scaling and expansion and provide tools to reach new markets³⁰;
 - expand their customer base or target new staff³¹;
 - Conversely, platforms also need users to develop.

■ Online platforms are diverse and evolving – don't rush to regulate:

- While online platforms can share certain characteristics, they are diverse in both form and function. In 2016, the European Commission assessed the role of platforms – it struggled to find a legally exclusive definition of online platforms and concluded that a one size fits all regulatory approach was not appropriate for the diverse types of online platforms. Therefore, any regulation of platforms risks impacting the entire online ecosystem, creating burdens for all kinds of online platforms (incumbents and start-ups) and their users.

■ Address any market failures using evidence and better regulation principles:

- EU policy makers should continue an evidence based approach and continue to enable conditions for online platforms and broader digital adoption to thrive in the EU. The Commission's own Better Regulation principles call for the enforcement of existing regulation (in this case predominantly the EU competition law), development of self-/co-regulatory regimes before the introduction of new legislation. The rights of market actors should be balanced – adequate market information, IP rights, maintaining and safeguarding freedom of contract of companies. On data - the implementation of GDPR must provide a uniform framework and level pitch for processing the personal data of European citizens. Ibec supports EU legislation to remove unjustified restrictions to the free flow of data. Without evidence of market failure, the current EU framework and contractual arrangements offers the necessary flexibility to address emerging data issues and develop the data economy³².

26. E.g. online advertising platforms, marketplaces, search engines, social media and creative content outlets, application distribution platforms, communications services, payment systems and platforms for the collaborative economy.

27. <https://ec.europa.eu/digital-single-market/en/online-platforms-digital-single-market>

28. <https://ec.europa.eu/digital-single-market/en/platforms-to-business-trading-practices> provides details of Commission work on data, terms and conditions, transparency and resolution mechanisms.

29. <https://ec.europa.eu/digital-single-market/en/news/tackling-illegal-content-online>

30. <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Technology-Media-Telecommunications/gx-tmt-small-business-big-technology.pdf>

31. [https://www.oxera.com/getmedia/84df70f3-8fe0-4ad1-b4ba-d235ee50cb30/The-benefits-of-online-platforms-main-findings-\(October-2015\).pdf.aspx?ext=.pdf](https://www.oxera.com/getmedia/84df70f3-8fe0-4ad1-b4ba-d235ee50cb30/The-benefits-of-online-platforms-main-findings-(October-2015).pdf.aspx?ext=.pdf)

32. Ibec (April, 2017) Submission on European Commission COM (2017) 9 Final and SWD (2017) 2 Final, January 10, 2017

■ **Enable further digital adoption and entrepreneurship:**

- Digital technologies can enable SMEs to enter new markets, increase sales and create jobs. Digital entrepreneurship can be enabled by having the right mix of policy, skills and infrastructure. EU policy makers should consider working with industry to develop guidance that increases information on the opportunities offered by digital and assists SME digitalisation.

3. Leverage digital as a driver for European economic growth and societal benefit

Leveraging the potential of Europe's digital economy is not simply about the integration of technology into organisations or infrastructure; it is about enabling our people to accomplish more with technology through the right knowledge, training and skills. Enhancing digital skills and encouraging digital inclusion will improve Europe's development as a leading digital economy and society. The success and long-term sustainability of the digital single market will be bolstered by creating an environment that shuns protectionism, encourages digital innovation and trade, and enables digital adoption among member states, businesses and consumers alike.

Work with, not against, technology

The ongoing development of Artificial Intelligence (AI)³³ and digital automation in the workplace are subjects of growing policy discourse at EU³⁴ and international level. No dedicated Commission Strategy currently exists on AI³⁵ but a variety of existing EU initiatives overlap the subject (e.g. H2020 funding, the Free Movement of Data initiative, Products Liability Directive and the Communication on Digitising European Industry)³⁶.

AI and digital automation have positive applications in many areas including agriculture, energy, transport, manufacturing and online services. AI has the potential to double annual economic growth rates of developed economies and increase labour productivity by 40% within 20 years³⁷. Nevertheless, concern has been raised around the pace and potential impact

of technological change on jobs³⁸. Developments in technology will undoubtedly continue to transform the structure of work and business as they have in the past. Efficiencies found through technology mean that some jobs/processes will become displaced, some jobs/processes will change, and new jobs/processes will be created, leading to an overall growth in productivity and jobs – technology can complement and augment people in their work. Managing this transition well can prove positive for total net employment and economic growth in European countries³⁹. However, realising these benefits requires urgent action. Policy makers need to run with technology and create the right conditions around training, education and lifelong learning that ensure our businesses and workforce can adapt to changes in technology and a different skill

33. A term encompassing multiple technologies that can be combined to sense, comprehend, act and learn. Examples include natural-language processing, image understanding, text understanding and generation, voice recognition, machine learning and autonomous cars.

34. <https://ec.europa.eu/digital-single-market/en/blog/future-robotics-and-artificial-intelligence-europe>

35. The European Commission plan a Communication on AI in early 2018.

36. European Commission (2017) Presentation entitled, 'Initiatives in AI' <http://www.oecd.org/going-digital/ai-intelligent-machines-smart-policies/conference-agenda/ai-intelligent-machines-smart-policies-huet.pdf>

37. Accenture (2016) Why Artificial Intelligence is the Future of Growth

38. https://www.oxfordmartin.ox.ac.uk/downloads/reports/Citi_GPS_Technology_Work_2.pdf

39. McKinsey & Co. (2017) Digitally-enabled automation and artificial intelligence: Shaping the future of work in Europe's digital front-runners. The study finds that Ireland is among several EU countries that could benefit from the adoption of AI and digital automation.

structure in the future of work. To enable a competitive digital single market, we must encourage social protections and labour markets that can adapt to a world of work that demands different skills and much more flexibility.

EU policy makers should:

- Take a human centric approach to our digital development:
 - Invest in education, skills and training for the future of work. Encourage talent and digital inclusion.
 - Ensure that the employment rights framework and social protection system facilitates flexible working arrangements, new forms of work and management of remote working, employee productivity and employee performance.
- Employ a considered and evidence based approach in encouraging the development and adoption of AI and digital automation in Europe.
 - Ensure an informed and fact-based dialogue among relevant stakeholders to identify potential economic and societal opportunities and challenges on a case by case basis. Build stakeholder understanding and trust in the adoption of technology. Policy makers should remain informed on AI developments through a continued dialogue with stakeholders in industry, the research community and civil society.
- Generally, the roll out of AI is at an early stage. Realising its positive potential should not be hampered by disproportionate regulatory obstacles. Regulatory intervention should be considered only where real market failures exist. Existing legislative frameworks can apply to many cases that apply AI in different sectors. There can be no horizontal, one-size-fits-all approach to this technology. Different uses of AI pose different challenges and require different responses.
- Review existing legislation and policy initiatives to ensure they are not impeding the use of AI in emerging technologies.
- Foster public and private R&D in AI and digital automation.
- Lead by retaining a global outlook to our digital development. The policy discourse on AI and digital automation is not limited to Europe – it is being discussed at OECD⁴⁰ and G7 levels⁴¹. The EU should engage its international partners on AI and digital automation. This engagement can deepen our mutual understanding of the opportunities and overcome shared technical and policy challenges.

40. <http://www.oecd.org/going-digital/ai-intelligent-machines-smart-policies/conference-agenda/>

41. G7 Italia (2017) ICT and Industry Ministers' Declaration – Making the next production revolution inclusive, open and secure. Annex 2 of the declaration discusses AI.

Develop skills, encourage talent and diversity

In one way or another, today's workplace increasingly involves a digital element. Digital skills are required in a range of emerging occupations and there is an increased need for digital skills across all sectors. Re-skilling Europe's workforce is essential to reap the benefits of this technological change. Currently 40% of EU citizens possess digital skills whereas 90% of jobs will require them by 2025⁴². The European Commission adopted a New Skills Agenda for Europe in June 2016. The objective of this proposal is to develop a broad set of skills, across the EU, including digital skills, which will ultimately boost employability, competitiveness and growth in Europe.

Technical knowledge can become obsolete with time. So, while more investment in digital skills is required, there is a need to emphasise on-the-job training, lifelong-learning⁴³ and a combination of skillsets that will make organisations and their people more adaptable to technological change⁴⁴. Alongside specific technical skills, critical thinking, self-management, creativity and entrepreneurial skills must be developed as they are vital in the workplace today and to success in the jobs of tomorrow. This obviously has implications for pedagogy, the learning environment and assessment but at its root involves instilling the value of lifelong learning from the earliest possible stage.

As well as a demand for digital talent; an aging workforce and greater diversity in the labour market have forever changed the employment landscape. Europe needs a talented workforce to compete and this means a diverse workforce drawn from 100% of the available talent - from an economic point of view, how well each country continues to meet the challenges of diversity will determine the future success of industry. We have come a long way in making changes to how diversity and inclusion works but we still have more to do.

EU policy makers should:

- Invest in skills for the future of work
 - Align the needs of labour markets and education and training systems. Talented people are at the heart of all innovation. The EU Commission's New Skills Agenda for Europe must emphasise the connection between human capital and skills development and the ability to conduct world class research. A single digital market is a key tool to enable this.
 - Focus on learning outcomes and employability in education and training systems at all levels. This will facilitate quality, transparency and recognition of qualifications – fostering mobility in the EU and permeability between different learning pathways.
 - Include digital skills alongside literacy and numeracy as a basic skill;
 - Integrate digital skills into classrooms at an early age.
 - Nurture entrepreneurial thinking among young people by embedding key aspects such as creativity, initiative, resilience, analytical and critical thinking, intelligent risk-taking and collaboration across curricula from primary to higher education. Investments to develop skills at an early stage will not only lead to productivity in the long-run but also a more equal distribution of skills boosting upwards mobility.
 - Promote life-long learning, training and upskilling in digital. It is essential that workers and job-seekers can keep pace with technological advances.
- Promote new ways of learning
 - Broaden the use of digital platforms in online learning beyond universities and into vocational education and training. Massive open and online courses (MOOCs) are being used to deliver education and training programmes and e-apprenticeships are using digital platforms to teach digital skills.

42. European Commission (2016) Skills Guarantee Roadmap

43. Peter Senge (1990) The Fifth Discipline: The Art and Practice of the Learning Organization. Argues that organisations that will excel in the future will be those that discover how to tap people's commitment and capacity to learn at all levels.

44. OECD (2017) [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/EDPC/RD\(2015\)20&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/EDPC/RD(2015)20&docLanguage=En)

- Empower educators to embrace digital skills and platforms in the classroom and to prepare students for life beyond the classroom in the digital economy. Provide professional development opportunities to encourage the use of digital, creative and entrepreneurial thinking skills. The use of digital platforms and online resources will ensure consistent quality and enable the exchange of experience.
- Promote collaboration in learning
 - Create a coherent EU strategy for digital learning and open educational resources across all education and training sectors. This would enhance resource efficiency and broaden participation. Inform the strategy with an understanding of sectoral differences in the use of digital learning methods.
 - Promote greater collaboration between industry, government and education providers in the development, promotion and delivery of Science, Technology, Engineering and Maths (STEM), language and digital skills all levels. Actively promote at primary and secondary education level STEM subjects and available high-quality career paths in science, engineering and technology for women. In parallel, the Commission should develop a framework that promotes STEM subjects and encourages member states to learn from each other in developing STEM talents across the EU.
- Encourage talent and diversity:
 - Continue to improve Europe's attractiveness to mobile talent and investment - market the EU as a location to invest or develop a career in the digital economy.
 - Education and challenging stereotypes - There is a need to challenge occupational stereotypes by encouraging more women into male dominated industries and investing in careers advice that provides real information and options to students. This means building an awareness of gender stereotyping into teacher training curricula, overcoming the challenges of subject availability and opening up girls' horizons to broader careers for example as entrepreneurs, in STEM or other technical fields. This requires career guidance, exposure to role models from industry to bring to life non-stereotypical career opportunities and the availability of work placements in organisations in gender atypical areas. We need to ensure that key influencers such as career guidance teachers and parents are aware of the career paths and options in gender atypical areas.
 - Share best practice and break barriers - provide tools and share examples of good practice that employers have engaged in to break down the barriers to gender balance. This gives employers real business and economic reasons rather than purely legislative reasons to embrace diversity.
 - Promote evidence based policy that works. For example, while some call for quotas to solve gender balance in the workplace, Ibec research has found that some of the challenges to female labour market participation are fundamentally rooted in the structures within our society for example the lack of available, affordable quality childcare and the effect of the tax system on second earners. Similarly, digital fluency - the extent to which both men and women have embraced digital technologies to become more knowledgeable, connected and effective - is helping to close the gender gap and enable people to work in a non-traditional way. It is a key enabler to greater work flexibility, time management and productivity⁴⁵.
 - Promote flexibility within all forms of employment, by promoting flexible forms of work and working arrangements in general, various categories of persons can be brought back to, or kept in labour markets so as to avoid a segmented labour market.

45. Accenture (2016) Getting to Equal – How Digital is Helping Close the Gender Gap in Work

Enable digital entrepreneurship, trade and innovation

Digital can enable SMEs to increase sales, enter new markets and create jobs. Digital entrepreneurship can be enabled by having the right mix of policy, skills and infrastructure. However digital entrepreneurs also require support and access to capital at different stages of their business development. To enable a competitive digital single market, we must encourage entrepreneurship trade and innovation.

EU policy makers should:

- Develop guidance that assists both SME digitalisation and SME compliance with EU data protection requirements.
- Attract more venture capital with a digital focus. VCs have networks, resources and expertise that can help start-ups access finance and shape their business development.
- Facilitate the development of alternative financing mechanisms to supplement normal bank offerings, including digital platforms which facilitate peer to peer lending, equity financing, trade financing etc.
- Ensure our tax policy framework remains outward looking and supports digital economic development in Europe. Establishing a separate framework for taxation to be levied on the digital economy would not only run contrary to the principle of neutrality (as set out in the Ottawa Taxation Framework) but would become increasingly unworkable as growing numbers of 'pre-digital' businesses diversify their activities to offer more choice and better services to consumers. Where BEPS issues⁴⁶ do emerge, it is our continued view that issues which are particularly relevant to digital intensive firms will need to be dealt with as a coherent part of the overall BEPS framework. Like other business groups at OECD and EU level, Ibec is concerned that proposed unilateral action on digital taxation at EU level will only serve to create further complications as the economy becomes more complex and ultimately undermine our growing digital economy.
- Use free trade agreements (FTAs) as a vehicle to promote cross-border data flows and e-commerce; and to address digital protectionism without prejudice to EU data protection rules. The issue of cross-border data flows is of strategic interest for the EU, as already identified in the European Commission's 'Trade for All' Communication of September 2015. It is time to send the right signal to our trading partners and develop a position that will enable the EU to advance on this matter in trade negotiations both at bilateral (e.g. FTAs negotiated between the EU and its partners) as well as plurilateral and multilateral (e.g. TISA and WTO) levels.
- Facilitate access to finance for digital innovation and entrepreneurship.
- Promote the use of digital skills and platforms in the wide innovation system, including incentives to digitally store, share and reference data, information and experience.
- Provide incentives for companies and research institutes to cooperate in networks and clusters to facilitate the commercialisation of innovations.
- Support the digitalisation of manufacturing and services.
- Address operational challenges faced by e-procurement, namely interoperability and security of sensitive data.
- Work ambitiously toward reaching the Europe 2020 target of 3% of the EU's GDP invested in research and development.
- Ensure the post-2020 Multiannual Financial Framework (EU's long-term budget) adequately supports Europe's development as a global digital leader.
- Ensure that the outcomes of Brexit discussions enable data flows and trade in services and goods; and that Ireland is not disadvantaged in terms of R&D and international investment.

46. Base Erosion and Profit Shifting, <http://www.oecd.org/tax/beps/>

Deliver the promise of a European Data Economy

Ibec, like several European business groups and like-minded Member States, supports EU legislation to remove unjustified restrictions to the free flow of data that are critical to: day to day business operations across our economy; the integrity of the digital single market; and the EU's global competitiveness. Any direct or indirect data localisation requirements should be subject to EU scrutiny and only permissible if proportionate and in line with EU legislation and single market principles. Without evidence of market failure, we see no need for regulation on 'emerging issues' identified by the Commission's Communication on building a European data economy. We believe the current EU framework and contractual arrangements offers the necessary flexibility to develop our data economy⁴⁷.

EU policy makers should ensure:

- National localisation measures should no longer restrict the free movement of data. Existing national measures should be removed with urgency. The only exception to this should be for justified national security reasons. This single exception must be strictly defined, and not broadened to encompass "public safety" or "public sector" data, as some have proposed.
- Member States should be restricted from passing future national localisation measures. This would be enabled through the proposed notification procedure if the Commission were granted the necessary powers.

- Only security requirements of the Member State where the data is being processed and stored should apply. To avoid increased administrative burdens and legal uncertainty, this should not concern requirements applicable where the data was originally sourced from.
- National authorities should be able to carry out regulatory control as if the data was stored on their territory. It is important that the scope of this provision is not broadened beyond access for regulatory control.
- Business-to-business data portability can be ensured by industry-led initiatives, assistance and encouragement of market players to draw up self-regulatory codes of conduct or best practice sharing. It will be fundamental to monitor the development and implementation of self-regulatory codes of conduct and best practice sharing to overcome lock-in situations between service providers whilst not disrupting contractual freedom.

47. Ibec (2017) Ibec views on the European Commission Communication, 'Building a European Data Economy' See: http://ec.europa.eu/information_society/newsroom/image/document/2017-30/consultation_data_eco-ibec_6523D4FB-0B70-E7BE-0D27BF4C6704F367_46160.pdf

Don't rain on the Cloud

Cloud computing offers enormous advantages in terms of cost efficiency, security, agility and ease of scaling, especially important to SMEs. For example, Cloud allows companies to only pay for the IT services they consume and to avoid the capital IT investments traditionally required. It enables much faster prototyping and deployment of innovative solutions, and flexible scaling of capacity, as is often required to run big data analytics. Trust in Cloud computing is essential for cloud to reach its full potential and trust in cloud providers is the prerequisite to increased cloud adoption and growth.

EU policy makers should:

- Promote the benefits of cloud computing services among all sectors to enhance the competitiveness of the broader EU economy.
- Promote trust in cloud computing e.g. through initiatives such as the EU Cloud Code of Conduct ⁴⁸.

Leverage ICT standards as a building block of the digital economy

Standards are important building blocks of any economy.

EU policy makers should:

- Maintain its collaborative approach to ICT standardisation. Further digital adoption will require standards based on consensus between a broad range of stakeholders.
- Develop standards using a bottom-up approach and the following principles: inclusiveness, consensus, transparency, effectiveness, technology-neutrality and impartiality.
- Emphasise the global relevance of digital standards developed. The digital economy is global, so globally informed standards will avoid market distortions and enable fair competition.

Adopt a balanced approach in developing the potential of the collaborative economy

The collaborative economy can prompt competition in traditional markets and offer new opportunities for innovative business models, growth and enhanced consumer benefits. Naturally, competition must be fair.

EU policy makers should:

- Adopt an evidence based approach in any considerations of guidance or the regulatory environment in this area to avoid stifling potential innovation and consumer benefits.
- Avoid divergent regulatory approaches at member state level that risk fragmenting the single market.

48. <https://eucoc.cloud/en/home/>

Conclusion

Europe can unlock the potential of a digital single market (DSM) that can create up to €415 billion in additional growth to its economy. In May 2017, the European Commission reached the midway point of a strategy that prioritises the digitalisation of the single market. That strategy is welcome, but its ultimate success must reflect economic growth and job creation across Europe. Policy makers must continue to work with business in implementing a digital single market that works.

The implementation of an effective digital single market policy framework should enable our businesses, both big and small, to compete globally, grow and create jobs. The DSM policy framework should provide European citizens with: opportunities to start their own businesses and employment; better health; greater connectivity; and greater choice in new and innovative goods and services. A digital Ireland is important to the development of a European digital ecosystem. However, Europe and Ireland face increased global competition in both the level and pace of its digital development. Our shared ambition must be matched by deeds.

Our vision for a digital single market

A digital single market where policy makers understand and respond to the needs of business is more important than ever for innovation, growth and jobs. Europe needs an accessible, secure, outward looking single market that embeds and encourages digitalisation as an enabler of greater connectivity, innovation, investment, competitiveness, growth, global trade and greater choice in goods and services.

Our priorities for a digital single market

The rate of technological and behavioural change in our increasingly digital age can often outpace policy and regulatory processes. Therefore, EU policy makers need to develop and implement a flexible,

outcome-based policy framework that avoids undue regulatory burden or obsolescence and unlocks the positive potential of a digital economy for businesses and consumers alike. This approach must recognise the global nature of digital and remain open to the principles of innovation, competition and free trade.

EU policy makers must work with business to implement a digital single market framework that:

- Encourages like-minded member states to collaborate in enhancing the level and pace of digital development across the broader EU economy.
- Encourages e-commerce and digital entrepreneurship across the broader economy by boosting awareness of its benefits and by cutting red tape across the EU.
- Unlocks a pro-investment climate in digital infrastructure to improve access and connectivity across the EU.
- Creates an environment that adequately protects personal data and IP, while supporting continued investment in secure digital innovation and quality digital content across the EU.
- Develops digital knowledge and skills and attracts mobile digital talent and investment to the EU.
- Promotes free data flows and digital in trade agreements.
- Enables global leadership by the EU and its members and leverages the opportunities offered by digitalisation.

About the Ibec digital economy policy committee

Ibec is the group that represents Irish business both domestically and internationally. The cross-sectoral Ibec digital economy policy committee provides a platform where stakeholders can engage on digital affairs. The Committee is chaired by Alastair Blair, Country Managing Director, Accenture Ireland. The committee's mission is to lead, shape and promote policy and conditions for a globally competitive digital economy that delivers jobs, growth and prosperity in Ireland. The Committee acknowledges and thanks all external stakeholders, Ibec policy and sectors who contributed views in the development of this document.

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