DIGITAL UNION

BACKGROUND

Information and communication technologies (ICTs) have driven productivity gains and growth in the EU. Over the past three decades, technological ‘convergence’ has been blurring the boundaries between telecommunications, broadcasting and IT. There is also a fast expanding revolution in the way we produce goods and use them in our day to day lives. The ‘internet of things’ (IoT), involving connected cars, wearable devices and sensors, gives the internet an increasingly ubiquitous dimension. Parliament has recalled the need to use the ‘digital dividend’ spectrum to achieve broadband for all EU citizens, and has stressed that further action is needed to ensure ubiquitous and high-speed access to broadband, as well as digital literacy and competencies for all citizens and consumers.

The Committee on Industry, Research and Energy (ITRE) plays therefore a crucial role in addressing legislation for both technological and societal changes.

INSIDE

This leaflet provides abstracts of a compilation of papers prepared by the European Parliament’s Policy Department A: Economic and Scientific Policy at the request of the ITRE Committee in relation to the Digital policies. To access the publication directly, please scan the QR code.

CONTACTS

To contact Policy Department A: Economic and Scientific Policy or to subscribe to our newsletter please write to: Poldep-Economy-Science@ep.europa.eu
Industry 4.0 - February 2015

This study analyses the Industry 4.0 Initiative which encompasses the digitalisation of production processes based on devices autonomously communicating with each other along the value chain. It considers the potential of the initiative and business paradigm changes and impacts of this transformation. The study assesses the rationale for public intervention and outlines measures that could be adopted to increase the gains and limit the threats from Industry 4.0. This study analyses the current status and potential of energy storage in the European Union. It aims at suggesting what market designs and regulatory changes could foster further cost reduction and further deployment of energy storage technologies to provide services supporting the Energy Union strategy.

Open Innovation in Industry, Including 3D Printing - September 2015

Policymaking to alleviate energy poverty needs to find a balance between short-term remedies and the resolution of long-term drivers of energy poverty. EU policy might need to work towards a) finding a definition of energy poverty; b) supporting national policies financially through EU coordination; and c) setting minimum standards for energy efficiency of buildings and devices.

Cross Competition among Information (Digital) Platforms - June 2015

This The workshop, prepared by Policy Department A for the ITRE committee, addressed the questions “should we avoid global information monopolies, and what place for European platforms?” It concludes that it is unclear how dominant large digital platforms actually are. Markets are often contestable due to dynamic competition for the market. Policy should focus on paving the way for European champions and there is a need for revising non-digital policies governing traditional industries in order to remove barriers for enterprises to adapt to new realities.

Mapping Smart Cities in the EU – January 2014

This report was commissioned to provide background information and advice on Smart Cities in the European Union (EU) and to explain how existing mechanisms perform. In exploring this, a working definition of a Smart City is established and the cities fitting this definition across the Member States are mapped. An analysis of the objectives and Europe 2020 targets of Smart City initiatives finds that despite their early stage of development, Smart City objectives should be more explicit, well defined and clearly aligned to city development, innovation plans and Europe 2020 in order to be successful.
How to Build a Ubiquitous EU Digital Society – November 2013

In this study, we analyse the achievements and failures of the *European Regulatory Framework for Electronic Communications*, with an eye to its impact on the broader EU economy; contrast it with regulatory models in other parts of the world; evaluate the costs and benefits of various interventions such as international mobile roaming; consider the interaction between fixed and mobile networks; assess the European Commission’s proposed Connected Continent proposals of 11 September 2013; and make policy recommendations going forward.

Entertainment x.0 to Boost Broadband Deployment – October 2013

We explore the definition of broadband and explain its interaction with European policy goals; analyse available data in order provide a detailed, objective and realistic picture of the broadband deployment, adoption, and usage situation in the EU from a number of different perspectives; and assess the drivers of broadband today, with particular emphasis on audiovisual and entertainment services. Measures to promote demand in general and the distribution of IP-based audiovisual content in particular, would appear to be warranted.

Data and Security Breaches and Cyber-Security Strategies in the EU and its International Counterparts – September 2013

This long briefing provides an overview of the definition of security incidents and breaches and an analysis of their scale and trends. We summarise the current EU-level efforts to address network and information security, review some of the provisions of the Commission’s 2013 proposals for a Network and Information Security Directive and offer recommendations. We have some potentially major concerns including the relationship of incident notification achieving the outcomes of the directive, potential for overlapping regulation and definitions of covered entities. We also suggest that it would be helpful to clarify what kind of incidents the Directive is aimed to address.

SME Participation under Horizon 2020 – November 2013

This study focuses on an assessment of the future share and role of SMEs in Horizon 2020 and on an understanding of the proposed mechanisms for SME participation. To this end, the study explores the features that characterise the research context for SMEs, notably their current participation under FP7, the modalities and the benefits of their participation in research activities. Moreover, it provides facts and figures on the objectives, governance and functioning of the dedicated SME instruments and modalities foreseen under Horizon 2020.
**The Attractiveness of the EU for Top Scientists** - June 2012

The study shows that while Europe has a strong science and research base the European research sector does not currently represent an attractive enough proposition for top researchers. To effectively address this problem, policies must be developed that specifically focus on the quality of the research environment while also creating the conditions that can best promote and reward scientific excellence. Opportunities exist at the EU level to positively address these issues, primarily in the context of targeted actions in relation to smart specialisation initiatives and specific actions in the framework of cohesion policy. There is a clear need also to strengthen the ERC and to streamline international cooperation with third countries in relation, for instance, to the Horizon 2020 initiative.

**Scrutiny on Horizon 2020 Focusing on the European Parliament’s Priorities** - February 2016

This in-depth analysis focuses on the European Parliament’s key priorities for the Horizon 2020 programme. It assesses the extent to which the EP’s key priorities, including the “energy challenge” have been implemented in the programme. It identifies measures, programmes and policy actions addressing these priorities, as well as bottlenecks in the implementation processes. It provides policy recommendations to improve the implementation of existing measures.

**POLICY DEPARTMENTS**

The five policy departments are responsible for providing - both in-house and external - high-level independent expertise, analysis and policy advice at the request of committees and other parliamentary bodies. They are closely involved in the work of committees which they support in shaping legislation on and exercising democratic scrutiny over EU policies. Policy departments deliver policy analysis in a wide variety of formats, ranging from studies and in-depth analyses to briefings and the Fact Sheets on the EU.

**CONTACTS**

**Policy Department A - Economic and Scientific Policy**

ECON - ENVI - EMPL - IMCO - ITRE - TAX 2 - EMIS - PANA

poldep-economy-science@ep.europa.eu

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