

## INPACT Priority VII

### Adapt political structures and processes to breakthrough technologies and new business models, including digitization

Notes from 1<sup>st</sup> Working Group Meeting  
11 October 2016, European Parliament, Brussels  
Hosted by Angelika Mlinar (ALDE, Austria) &  
Michal Boni (EPP, Poland)

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**MEP Stewards:** Angelika Mlinar (ALDE, Austria) and Michal Boni (EPP, Poland)

**Objective:** Achieve a common understanding on the objectives and goals of the WG

**Participants** see annex

#### Short summary

Opening MEPs

- Central to the policy on the topic is responsiveness and adaptability:
  - Different sectoral aspects and needs for breakthrough technologies (BT)
  - Allow for full deployment and full access to the internal market of BT
- Goal is not to regulate technologies but to facilitate also through fostering soft law
- Essential is strong stakeholder involvement and communication
- Innovation deals should be considered

Key discussion points:

- **Nature of breakthrough technologies:** often defined from a (disruptive) market perspective, however this narrow view is somewhat misleading because it doesn't mean that underlying technologies are per definition new or breakthrough themselves. It also is too narrow as it does not cover societal and environmental aspects. Most participants agree on a broad perspective: market, societal and environmental, based on BT: contributing to quality of life
- **Perception and acceptance of BT by the public:** overall consensus that this is due to a lack of knowledge often in combination with (social) media reporting. Better communication and information is needed but will not by itself solve the issue; education in science basics should be integral to the programmes already at primary school; lifelong learning and connectivity (especially in rural regions) are seen as key elements
- **Sectoral versus 'horizontal' approach:** both perspectives were argued:
  - We are faced with societal and other challenges that have to be addressed in a horizontal manner, also when it comes to BT that can contribute to solutions: climate change, energy dependency (?), ever increasing importance of digitization (privacy, employment challenges, US platform dependency

- etc), aging population (including health aspects), exclusion of significant parts of the population etc.
- Different sectors have different needs that are next to the horizontal issues; for BT to be successful these specific needs are to be taken into account
  - **Instruments, processes, models:**
    - PPP's are considered as good instruments that allow for flexibility and cope with some of the challenges; they should be inclusive from the start however to be effective. The Climate KIC was presented as a functioning example.
    - Pre Commercial Procurement (PCP): is a powerful instrument for administrations (at all levels) to stimulate BT. Despite efforts from various players including the EC the widespread uptake of the instrument is not yet there, and deserves more attention. The often conservative approach of public procurers, (perceived) risk, initial costs, and unfamiliarity play a role.
    - Unbalanced supply and demand (or a mismatch) is a hampering factor for BT (in particular in the AGRO sector) and should be addressed
    - Certain BT will/can have a disruptive effect on public finance, which needs to be anticipated and addressed

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**Background and introduction**  
(Input from Angelika Mlilnar's office)

Breakthrough technologies, or Future and Emerging Technologies (FET), are technologies which are expected to bring fundamental change and serve as the basis for many subsequent technological inventions. They lie at the heart of changes in technological paradigms and create new technological systems and even new industries.

The EU is already strongly supporting the research on new and breakthrough technologies through a number of programs, mainly Horizon 2020. However, to keep Europe at the forefront of worldwide change and technological advancement, we need to adapt our overall political structure and processes. Only through the creation of an open, inclusive and innovation-friendly environment will Europe be able to stay competitive at a global level.

So how can European policymakers support breakthrough technologies? Before we can answer this question we have to take a closer look at the great variety of technologies and the very different fields of application we are talking about: From genetic engineering and medical technology to autonomous driving, from energy storage solutions to artificial intelligence, from material science to nano-technology, we are dealing with many different technologies under one name: Breakthrough.

Therefore, this context raises a few **questions** for which we need to find answers:

How do we define 'breakthrough' and how can Europe stay at the forefront in R&I for these technologies?

Which instruments are used to assess the economic, social and environmental impact of breakthrough technologies?

Do all breakthrough technologies have different needs in terms of political framework or can common needs be identified?

Does a common European approach on emerging technologies exist? Is it useful to be developed?

Which instruments are used to assess the policy measures for breakthrough technologies in place?

What can different, sector-targeted political strategies for breakthrough technologies look like?

How can we ensure full application and market readiness for breakthrough technologies?

How can we make sure that they have full access to the internal market?

How can we make our overall regulatory framework more flexible and adaptable? How can we regulate to innovate and enable?

#### **Innovation deals:**

The Innovation Deals initiative was introduced in the [Circular Economy Package](#) adopted by the European Commission in December 2015. The Commission introduces the concept of innovation deals as «a pilot approach to help innovators facing regulatory obstacles, by setting up agreements with stakeholders and public authorities». It is all about the cooperation between innovators, stakeholders, regulatory authorities and the Commission.

The Circular Economy Package consists of an [EU Action Plan for the Circular Economy](#) that establishes a concrete and ambitious programme of actions, with measures covering the whole cycle: from production and consumption to waste management and the market for secondary raw materials.

Innovation Deals (IDs) will allow innovators to quickly address legislative obstacles, shortening the time between moment of inspiration and market uptake.

Innovation Deals take the form of voluntary cooperation between the EU, innovators, and national, regional and local authorities. European Commission does not fund the preparation or implementation of IDs.

The Deals will be an innovation in how the Commission works, helping to form a more modern and responsive administration in line with the Commission's Better Regulation Agenda.

Main barriers in regulatory framework:

The essence of regulatory framework in Innovation Deals - [evidence](#) from Member States

- Two-thirds of the perceived regulatory barriers currently preventing innovators from bringing their ideas to the market can be overcome through explanations or clearer interpretation of specific regulations by public authorities.

Different interpretations and/or manners of transposition of national, local and EU legislation and the fast pace of innovation have led to a policy and legislative framework that may not always adequately support innovation and its market uptake.

**Regulatory Barriers can arise in the following situations:**

I. The regulatory framework

1. is de jure or de facto prescriptive in technology choice and discourages different solutions and new entrants;
2. establishes a level of strictness which is inconsistent with available cost-efficient technology, hence delaying investment and deployment of solutions.

II. Regulatory frameworks not sufficiently friendly for innovation, for example:

1. the regulatory environment is not fully in a line with sectors and the development of open innovation;
2. inconsistencies between regulations give rise to legal uncertainties and unnecessary additional compliance costs.

Stakeholders view the following as possible examples of the above:

- Health technology assessment,
- Nanomaterials: Towards a unified definition,
- Energy-efficient buildings.

III. Legislation is not appropriately implemented across Member States/European and National legislation duplicates or overlaps. The examples indicated by stakeholders presented in areas where implementation is a key issue are:

- Eco-design for resource efficiency,
- Energy-efficient buildings,
- Electrified vehicles.

IV. Gaps: If no EU legislation exists in a given field, barriers to the internal market may arise/there may be uncertainty for investment in innovation. Examples of this indicated by stakeholders are:

- Road vehicle automation,
- Health technology assessment,
- Low carbon hydrogen in transport.

Conclusion: The relation between innovation and regulation needs be further investigated both at the horizontal level and from sectorial perspective, in order to identify and reduce barriers and to find ways to improve opportunities for innovation.

### Participants list

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