



## INNOVATION AS A KEY IN THE TRANSATLANTIC TRADE & INVESTMENT PARTNERSHIP (TTIP)

### *The innovation dimension of the TTIP and its chapters*

#### I. Reference to innovation in the TTIP preamble

*A reference to innovation should be introduced in the TTIP preamble to outline the importance of innovation for the EU and U.S. economies, to keep and foster global leadership.*

In addition to this reference, TABC recommends including the following general principles:

- **Cross-border flow of information** is essential across all industries to enhance economic growth, job creation and social prosperity.
- **Elimination of “localization requirements” and other protectionist policies** for the application or transfer of technology, whose development is supported by public funds.
- **Support the role of independent advice and promote a transparent and science-based policy making.**
- **Better alignment of competition policy, in particular with respect to subsidies and innovation:** foster transatlantic dialogue and develop best practices.
- **Public acceptance and innovation:** bridge the gap between citizens, companies and decision makers.
- Innovation that leads to **growth and jobs**, ensuring it has an increased return on investment on public funding.

#### II. Introduction of key provisions on innovation in the TTIP chapters

##### **Part 1 – Market access**

Public procurement chapter

---

*Introduce provisions or a section on public procurement of innovation, as regards:*

- **Public Procurement of Innovation (PPI):** purchase of innovative products across the full value chain, services or processes through public demand with the aim to stimulate commercialization of innovative research and to improve the performance and functionality of public services to solve important socio-economic challenges.
- **Pre-Commercial Procurement (PCP):** the purchase might need to be preceded by research and development in order to accelerate innovation and prepare a future commercial purchase: this exploratory phase is called pre-commercial procurement (PCP) of R&D services in the EU. A variety of terminologies can be encountered in the U.S. depending on the public organization

such as pre-competitive procurement, procurement of innovation, public procurement of R&D services, public technology procurement, technology procurement etc.

- **PCP and PPI common objectives in the EU and the U.S.:**

- Stimulate economic growth by driving innovation from the demand side so as to increase the expected return on investments in R&D.
- Improve service levels of public entities and agencies to its citizens by becoming an early adaptor of innovative technologies.
- Shorter-time-to-market: accelerate innovation by funding transition process from R&D to commercialization.

⇒ **Proposed deliverables:**

TABC recommends that EU and U.S. government officials jointly develop a common policy for PCP and PPI by taking the following steps:

- Acknowledge the potential of public entities as early adopters to create demand for innovative products and industry which can bring research results into the market.
- Stimulate innovation through PCP and PPI for economic growth on both sides of the Atlantic.
- Define a joint mission, objectives, strategies and tangible results to be achieved.
- Focus on common challenges: Climate change, environment, homeland security, cybersecurity, cloud computing, healthcare, energy (smart grids), transportation, aging population.
- Leverage mature R&D procurement programs of the U.S. to develop joint initiatives with emerging PCP and PPI programs at the European Commission, specifically in Horizon 2020 and Member States.
- Encourage exchange of information and best practices between EU and U.S. procuring bodies.
- Create 'Technology Dialogues' between U.S. and EU public entities.
- Enable access to industry funding instruments from respective agencies on both sides of the Atlantic. They should extend their support for transatlantic PCP and PPI programs, thus encouraging public entities to become early adopters of innovation.

## **Part 2 – Regulatory cooperation**

### Regulatory coherence chapter

---

#### *Create a specific section for emerging technologies*

A number of emerging technologies are being developed on both sides of the Atlantic and cooperation on standards and regulation would allow (1) the creation of the wide transatlantic market; and (2) the EU and US to set global standards in these emerging technologies. These include (not exhaustive):

- **Electric Vehicles and Smart Grid**

Future standards for e-vehicles and smart grids are to be further discussed between transatlantic standard bodies and regulatory agencies to ensure transatlantic leadership in these emerging technologies, particularly on standards and regulation. First steps have been taken by the automotive industry to settle on the Combined Charging System (CCS) for fast electric recharging points for electric vehicles. One future issue is wireless power transfer which is going to be developed in the short term.

⇒ **Specific Challenges & Recommendations:**

Ongoing discussions between the standards and regulatory agencies must continue with distinct political support from both governments and input from relevant industry participants. For example, battery producers must be involved with ANSI and/or CEN/CENELEC when they address safety, the standardization of battery shapes and the format of cells/modules. The producers are actively engaged with the Original Equipment Manufacturers' (OEMs) and

understand what is being asked, what is practical to adopt. On the other hand, standardization of battery materials is not desirable as each battery materials producer needs the freedom to produce its own formulation according to the application and needs of each OEMs.

Pre-competitive scientific work in transatlantic research centers such as Argonne National Laboratory (USA) and Joint Research Centre in Ispra, Italy (EU), should focus on relevant issues and actively involve relevant stakeholders. Duplication of efforts should be avoided. Of importance is aligning approaches to foster the introduction and uptake of e-mobility (e.g. test procedures and safety measures).

On Smart Grids and Smart Meters, the Smart Grid Task Force of the European Commission including relevant stakeholders and regulatory bodies have developed positions on standards (CEN/CENELEC) and further regulatory issues. This could be the basis for international standardization and duplicating work might be avoided.

- **Energy Efficiency**

Both the EU and U.S. regulate energy efficiency of appliances through energy labels and minimum efficiency limits but they do this differently. Innovation is necessary to achieve high energy efficiency with the objective of saving energy when consumers use appliances at home. These are difficult considerations that require in-depth understanding of the function of appliances and how consumers use appliances.

⇒ **Specific Challenges & Recommendations:** It would be beneficial for the EU and U.S. to jointly analyze this area and work on a number of specific concrete issues such as measurement of energy efficiency, harmonization of product requirements and preferably their limits, certification of accredited laboratories. (See TABC's specific position paper on energy efficiency in TTIP)<sup>1</sup>.

- **Resource Efficiency supported through Implementation of Reuse and Quality Recycling Technologies**

The need to access natural resources and ensure supply of valuable and critical materials required by emerging and low carbon technologies (e.g. renewable energy, electric vehicles) has been recognized in the EU and the U.S., as has the need to more efficiently use the resources we already have.

⇒ **Specific Challenges & Recommendations:** Electrical and electronic equipment waste, referred to as E-waste or WEEE, is one of the fastest growing waste streams in both the EU and the U.S. The appropriate management of WEEE has not only an environmental impact by controlling hazardous waste but can also contribute to the recovery of resources such as valuable and critical secondary raw materials. Regulations and current informal approaches differ within and between the U.S. and EU for e-waste. There is need to develop one combined approach for what already exists. However, it is possible to work together to ensure that recognized standards and certification schemes are implemented to promote quality treatment throughout the entire recycling chain of waste electronics (from collection to final material recovery). This will encourage appropriate handling and maximize the recovery of valuable and critical resources and materials. The definition of WEEE could also be another work stream, in order to differentiate the types of WEEE.

⇒ **Proposed deliverables:**

- Recognition and use of international standards when they exist already (energy efficiency for instance).
- Improve scientific cooperation and transparency in the regulatory process.
- Strong link with TBT chapter.
- Implement recognized standards and certification schemes for promoting quality treatment throughout the entire recycling value chain of end of life electronics (from collection to final material recovery).

---

<sup>1</sup> TABC position paper on Energy Efficiency in TTIP: [http://www.transatlanticbusiness.org/wp-content/uploads/2014/05/TABC-position-paper\\_Energy-Efficiency-in-TTIP\\_July10-2015.pdf](http://www.transatlanticbusiness.org/wp-content/uploads/2014/05/TABC-position-paper_Energy-Efficiency-in-TTIP_July10-2015.pdf)

- Work together to set common standards in emerging technologies as: future energy efficiency appliances, electric vehicles, Smart Grid/Smart Metering, recycling for “mining” of strategic and critical minerals.

#### *Enabling technologies: nanotechnologies*

Nanotechnology has been recognized as a key enabling technology in the U.S. and in the EU. It is expected that a growing number of nanomaterials will enter the markets in the years to come.

The EU has already started to regulate nanomaterials as a whole and to impose strict requirements on nanomaterials (e.g. consumer information, notification) in certain sectors, which hampers their market access and discriminates nanomaterials against non-nanomaterials. Moreover, some Member States have or are in the process of introducing nano-inventories which also impede the market access of nanomaterials in these Member States. U.S. regulation on the other hand focuses exclusively on single nanomaterials with specific hazards.

#### ⇒ **Proposed deliverables:**

- Focus on cooperation: continue and promote further transatlantic cooperation in the area of safety research for nanomaterials.
- Increased regulatory cooperation for nanomaterials, as having a consultation process for new legislation to avoid further divergence and hopefully then also more harmonized legislation in future.
- Acknowledge guidelines and recognize recommendations in the area of health and safety developed by the OECD Working Party on Manufactured Nanomaterials. (OECD WPMN).

#### Technical Barriers to Trade (TBT) chapter

*Go beyond the TBT Agreement, while taking into account innovation*

#### ⇒ **Proposed deliverables:**

- Commitment to promote international standards.
- Recognize functional equivalent standards to prevent unnecessary duplication.
- Establish robust bilateral cooperation to ensure that emerging technology regulations with cross-border impact are performance based, allowing maximum flexibility to design innovative technologies and products in a cost effective manner.
- Bring sharper focus to the ongoing application of the WTO TBT Agreement and ensure that WTO members inclined to pursue national technology standards adhere to all applicable TBT requirements.
- Reliance on WTO TBT principles for the development of international standards
- Share and discuss research and development plans in emerging technologies areas and key enabling technologies areas, especially linked to the development of new regulations or standards.
- Exchange of research, information and results linked to the development of new technologies.

#### ICT

Governments should promote an enabling public policy environment that does not prevent innovative solutions before their merits can be tested in the marketplace. Governments and regulators should ensure a policy framework based on a light-touch regulatory approach that incentivizes investment and enables the development of new business models. Regulation should also avoid technology restrictions given convergence trends while relying on sustainable competition.

More efforts are needed to build integrated industrial systems. Today, policy makers and industry continue to work together around initiatives that function still too much as fragmented silos when addressing new technological and regulatory fields. All of these technologies and related initiatives are components of the future digital environment and require cross-sectorial coordination across

policymakers and industries. At a minimum, close coordination, collaboration and cooperation is required across all government policy makers and actors (both users and providers).

⇒ **Proposed deliverable:**

- Include specific provisions supporting cross-border flow of information that facilitate research into new and innovative processes and products, as well as technological developments such as the industrial internet.

### **Part 3 – Rules**

#### Sustainable development chapter - Energy and Raw Materials

Access to and affordability of non-energy raw materials are crucial for the transatlantic market and to advance the process of innovation. Major sectors of the transatlantic economy depend on access to raw materials, including construction, chemicals, automotive, aerospace, machinery and equipment, as well as high technology/ICT and consumer goods. A secure supply of key raw materials is a prerequisite for maintaining the industrial value chain and innovating new materials and products. The U.S. and EU need to jointly address market distortions affecting important raw materials available on the international market. At the same time resource efficiency and recycling should be recognized as a key dimension of raw materials security.

Main issues faced by TABC members are for instance:

- Supply risk and economic importance of some raw materials – Critical Raw Materials list from the European Commission (2014) and the U.S. (2011).
- Lack of transparency on the recycling value chain flow – lack of traceability and monitoring of certain waste (e.g. WEEE) after collection (e.g. illegal waste shipments).
- Sub-standard recycling processes which distort and disturb fair level playing field.

⇒ **Proposed deliverables:**

- Secure access to materials (both primary and secondary hence also recycling) that are critical to create green and energy efficient technologies (e.g. neodymium that is used in permanent magnets of efficient electric motors, indium that is used in solar panels, cobalt and nickel that are used in rechargeable batteries).
- The U.S. and EU should strengthen their cooperation in the development and use of standards, test methods and guides for the characterization, classification, waste collection and separation, improve waste management and re-use of valuable and critical raw materials where this makes sense from an economic and environment point of view.
- Develop substitutes, alternatives or reduce material use for critical materials used in energy efficient technologies where such materials may be strategic for U.S. and EU governments, in danger of short supply, subject to increased demand, controlled by very few companies and/or countries.
- Set the right framework on conditions and incentives for investments in the transatlantic market to foster sustainable supply.
- Boost transatlantic cooperation on materials research and eco-efficient recovery routes.
- Build a set of rules between the EU and the US on sustainable sourcing of minerals that is aligned as much as possible, and take a leading role in setting global rules.

#### Competition chapter

Taking into account the globalization of competition policy and mutual objectives to protect the global competitive process, foster innovation and reduce inefficiencies, the U.S. and the EU should encourage their competition authorities to adequately consider the link between competition, innovation, and

investment, and encourage global implementation of best practices through organizations, such as the OECD and the International Competition Network.

⇒ **Proposed deliverables:**

- A further stimulus towards harmonization between the US and EU competition policies would be key for a sustainable development of Europe and the US in a globalized economy.
- Foster transatlantic dialogue on the use of economic analysis as well as adequate remedies in antitrust and merger control proceedings of mutual concern and encourage global convergence through organizations such as the OECD and the International Competition Network.
- Develop best practices on due process (procedural fairness) for all competition proceedings and encourage their global implementation through organizations such as the OECD and the International Competition Network.
- Strict enforcement of competition law in all sectors and in particular in those driving innovation.
- Support newer competition agencies, in particular with respect to the intersection of intellectual property law and competition policy, as well as the dangers associated with using intrusive remedies that could negatively affect innovation.

---

#### Intellectual Property Rights chapter

Intellectual property is essential to economic expansion, business, societal innovation and national competitiveness for both the US and EU. IP-intensive industries are linked to 35% of U.S. GDP and nearly 30% of all U.S. employment; similarly IP-intensive industries are linked to 39% of EU GDP and roughly 35% of all employment in the EU<sup>2</sup>. As internet-enabled innovation increasingly drives productivity and growth on both sides of the Atlantic, the importance of intellectual property to creating new jobs and growing exports will only increase.

TTIP should reflect this shared reliance on intellectual property. Both markets share a deep commitment to protecting intellectual property and a recognition that strong intellectual property regimes are an indispensable element of successful economies and to create and maintain innovation and technology-driven exports, competitive opportunities, and jobs. See *TABC's specific position paper on IPR in TTIP*<sup>3</sup>

⇒ **Proposed deliverable:**

- Elimination of "localization requirements" and other protectionist policies for the application or transfer of technology whose development is supported by public funds.

---

#### Mobility of Workers chapter

In an effort to boost growth and jobs across the Atlantic, and given the current negotiations on the TTIP, EU and U.S. have an opportunity to come together to address major societal and economic challenges. For the economies to thrive, EU and U.S. need a highly skilled workforce to foster innovation, entrepreneurship and advance digitalisation.

Therefore, governments should play a role in empowering the future workforce by bringing specialised skills closer to the market, facilitate mobility of researchers, promote Science, Technology, Engineering and Maths (STEM), and help ease transition from education to work.

⇒ **Proposed deliverables:**

- Remove unnecessary impediments to transatlantic research and development and other cooperation in innovation through a fast track approach for expeditious processing of visa/work

---

<sup>2</sup> <http://www.epo.org/news-issues/news/2013/20130930.html>

<sup>3</sup> TABC position paper on IPR in TTIP: <http://www.transatlanticbusiness.org/wp-content/uploads/2014/05/TABC-Position-on-IPR-in-TTIP.pdf>

- permit applications.
- Improve current practical arrangements on the temporary movement of qualified persons by broadening the status of qualified persons, by reducing administrative burdens and by providing fast track mechanisms.
- Facilitate the transatlantic mobility of researchers and technologists engaged in collaborative projects.
- Current rights available under Mode 4 in the GATS agreement should be expanded to include additional skilled job categories such as researchers and technicians.

## R&D chapter

---

- **Remove obstacles to transatlantic R&D:**

- Procedures for the treatment of flows of controlled technology for collaborative, transatlantic research and development projects that recognize the particular needs for such exchanges: As for export control aspects, there are regulations in place, such as the Wassenaar Arrangement and licensing policies which enable the required exchange of knowledge and goods as part of international research cooperation. In practice, however, these regulations are very detailed and complicated, and in some cases even ambiguous.
- **Removal of (statutory) impediments to collaboration between public and private sectors thereby allowing for optimal research cooperation.**
  - o Examples: some US federal and state rules prohibiting settlement of disputes under a foreign jurisdiction.
  - o Mutual access to funding to EU and US respective programs.
  - o Gaps in info and familiarity between the approaches to IP and licensing Cost-sharing requirements for federally funded R&D – on the applied R and D side, not basic research (DOE as an example).
- **Removal of legal conditions impeding access to funding on both sides: example of liabilities for US companies to access Horizon 2020**
- **Provisions to facilitate the transatlantic mobility of researchers and technologists engaged in collaborative projects<sup>4</sup>.**
- **Remove obstacles to commercialization of research results**

- ⇒ **Proposed deliverables:**

  - Treatment of flows of controlled technology for collaborative, transatlantic R&D projects: simplification of highly technical descriptions will improve accessibility and ease of understanding
  - Facilitate reciprocal access to R&D programs including funding, tenders for innovation procurement, etc., especially for pre competitive research.
  - Reiterate the need to eliminate technology transfer as a condition to access markets or funding (esp. vis a vis third countries)

- **Develop innovative incentives and support for transatlantic R&D&I**

- Support transatlantic projects with multiple participants, as integrators of innovation ecosystem and with focus on emerging technologies.

---

<sup>4</sup> TABC Letter to Commissioner Malmstrom Calling for the Inclusion of Skills and Labour Mobility Issues in the TTIP: <http://www.transatlanticbusiness.org/wp-content/uploads/2014/05/6.Letter-to-Commissioner-Malmstrom-Calling-for-the-Inclusion-of-Skills-and-Labour-Mobility-Issues-in-the-TTIP-.pdf>

- Encourage collaboration between high level academia and ensure collaboration and cooperation as upstream as possible.
- Support for business incubators and other vehicles to assist young innovators.
- Develop financing options that go beyond support for R&D, i.e. support for broader access to funding sources, including by: exploring credit guarantees and banking sector support; helping business angels' networks widen their scope and stimulate venture capital; avoiding stifling private equity activities with more regulations.
- Support for policies that promote investment in innovation-centric sectors.
- Increase and encourage private companies' participation in R&D programmes, and give them a more innovation orientation, and reduce administrative burden.

⇒ ***Proposed deliverable:***

- Support transatlantic projects with multiples participants.
- Develop and allow transatlantic innovative funding for specific transatlantic projects (PPP etc.)

September 2, 2015