



## SCIENCE AND TECHNOLOGY OPTIONS ASSESSMENT OPTIONS BRIEF No 2012-05, June 2012

### Technology across borders

The aim of this study has been to trace the evolution of Parliamentary Technology assessment (PTA) from the OTA<sup>1</sup> model to a future pan-European participatory technology assessment (TA) and to deliver images of PTA future. The study consists of two parts: a review of the different existing PTA practices within the EU Member States and an exploration of the possible ways to develop and perform pan-European PTA.

A basic premise of the project was that Pan-European co-ordination and collaboration of national and regional PTA organisations have a significant potential, since all PTA organisations have to deal with the same technological developments. Working together can provide economies of scale and efficiency benefits, while it can contribute to a higher quality of work, as more experts work on the issue from different angles.

As part of the project, perspectives for future pan-European cooperative activities were explored by (preparatory) interviews and a conference with a targeted audience of members of national and regional parliaments and the European Parliament and representatives of PTA organisations and TA scientists on 7 September 2011 at the European Parliament in Brussels. **The conference addressed various aspects of pan-European PTA cooperation: its added value, main themes of future trans-national projects, as well as the various actors that could be involved and their roles in future mutual efforts.**

<sup>1</sup> OTA (Office of Technology Assessment) was an office of the US Congress from 1972 to 1995, which pioneered TA in a parliamentary context.

The project identified a number of themes and domains for potential pan-European cooperation. Firstly, based on the available expertise in European PTA organisations, there are two themes that could benefit from co-operation at a pan-European level. The first theme would be **nanotechnology**, addressing for instance the health and safety issues of nano-materials, the nano-code for researchers and the issues of responsible governance. **Global warming** would be another important theme, since it is a cross-border issue that is comparable from country to country, although national or regional technological solutions and regulatory issues will not always be congruent.

The other proposed themes for pan-European cooperation include the three E's: **Environment** (trans-boundary pollution, sustainable development, eco-systems, water), **Energy** (trans-national/regional supply, dependency, security, and resource choices) and **Economy** (globalisation of industries and its impact on quality and quantity of employment in high-tech sectors, collapse of financial markets).

The **health and ageing population** issue will be addressed in trans-national projects executed by pairing partners from countries that do not have established PTA organisations with partners from countries that already have such organisations, under the EU-funded PACITA<sup>2</sup> project. Three of these projects, namely Public Health Genomics, Ageing Society and Sustainable Consumption, will start soon.

<sup>2</sup> Parliaments and Civil Society in Technology Assessment (<http://www.pacitaproject.eu/>)

**According to the authors of the study, in pan-European coordinative projects, PTA organisations and members of parliament should meet and work together. Where possible, civil society organisations and the public should also be involved.** These will still be rather unique projects, in which common practices of working together across national and regional borders have to be developed.

The relation scientist - politician will need special attention. Bringing politicians in contact with scientists through PTA can help to raise parliaments' basic knowledge on S&T issues and tackle politicians' pre-conceived ideas about new technologies. Although politicians benefit from scientific PTA work, communication between the two is not that easy. **There are some barriers to an effective relationship between them, such as the discrepancies between long-term thinking in PTA work and short-term thinking within parliaments, the differences in the languages of science and politics, and the supply of lengthy reports by scientists when politicians need condensed, quick and easy-to-read outputs due to time constraints.**

The authors call for a truly interactive approach, in which both sides are adaptive and responsive to each other. This way, TA can become more than the production of studies by scientists on various impacts of new science and technologies, but also include long-term, strategic reflections by both the scientific and political worlds.

In order to ensure successful pan-European PTA cooperation, several **conditions have to be fulfilled.** These include **having a PTA structure in countries all over Europe, enhancing the science-politics interface by creating a mutual language, inclusion of the public and civil society organisations leading to new types of governance, creation of a meeting place where all stakeholders have an easy access, and, last but not least, the need for PTA to be mainstreamed in regional and national parliaments and the European Parliament.**

Through pan-European PTA cooperation countries can learn from each other. In countries where PTA is not (yet) institutionalised, PTA capacities can be built. Countries with a long track record in PTA can also benefit by sharing best practices and points of view, exchanging ideas and experiences, and comparing results.

Moreover, PTA cooperation can lead to an increase in the awareness of the importance of PTA among European citizens. This, in addition to the increased involvement of civil society organisations in national and regional PTA activities, can lead to new forms of governance of science, technology and innovation on the regional, national and pan-European level.

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Authors:

Christien Enzing

Jasper Deuten

Monique Rijnders-Nagle

Jon van Til

Technopolis Group/The Netherlands

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For further information, please contact:

Miklos Györfi, STOA Unit

Directorate G, DG Internal Policies

European Parliament

Rue Wiertz 60 - RMD 00J012

B-1047 Brussels

Tel.: +32 2 283 2505

Fax: +32 2 284 4984

E-mail: [STOA@europarl.europa.eu](mailto:STOA@europarl.europa.eu)

Website: <http://stoa.europarl.europa.eu/>