

# STOA

## Science and Technology Options Assessment



STOA Panel meeting  
Thursday, 29 October 2015, 09:30 > 11:00  
LOW N1.4, Strasbourg

### Minutes

The meeting started at 09:34 with Mr Paul RÜBIG, MEP and Chairman of the STOA Panel, in the chair.

#### **1. Adoption of the draft agenda (PE 563.483)**

- The Chair informed Members that interpretation was available in Bulgarian (BG), Czech (CZ), English (EN), French (FR), German (DE) and Italian (IT), and that the meeting was being web-streamed.
- The draft agenda was adopted without modifications.

#### **2. Approval of draft minutes - STOA Panel meeting of 10 September 2015 (PE 563.480)**

- The draft minutes were approved without modifications.

#### **3. Presentation of the final report of the STOA project 'ICT in the developing world'**

- The Chair underlined that the report to be presented was the outcome of a project that analysed the impact of ICT on poverty reduction in low and middle-income countries (LMICs, with a focus on the health sector – what support ICT might provide to strengthen health systems in LMICs. In addition, present EU actions in the area of improving ICT diffusion in LMICs were assessed. Building on the evidence collected, the study provided policy options for future EU action to help LMICs profit from all the opportunities offered by ICT.
- The Chair then gave the floor to the Lead Panel Member for this project, Mr Dario TAMBURRANO, MEP and STOA Panel member. Mr TAMBURRANO highlighted the importance of the study in light of the present refugee drama and noted that the purpose was to better understand the possibilities opened up by ICT. He explained that the study was a practical document to enable Members to charter policy options, which might be of great use in the future. He further pointed out that a main focus of the study was on the use of technology in healthcare, as healthy people could make a better contribution to a country's economy, among other things. New technologies gave the opportunity to poor populations to contact doctors and health centres even when living in remote areas. Access to information had an enormous effect, helping to trigger further development, hopefully also in LMICs. The EU could also learn from innovative ICT applications. They could be a useful tool to tackle some of the problems at the root of the migrant crisis. He concluded by saying that the digital literacy of people had to be improved in as many countries as possible.
- Following the introduction, the Chair welcomed and introduced the experts: Ms Silvia VIGNETTI, Director, and Ms Laura DELPONTE, Senior Researcher, from the Evaluation Studies Unit of the Centre for Industrial Studies (CSIL), Milan, as well as Mr Giorgio MICHELETTI, Senior Consulting Manager of the International Data Corporation (IDC), European Consulting Group, Milan.
- Ms DELPONTE started by introducing the main findings on the study. She explained that the study was divided in three sections: (i) the connection between ICT and poverty reduction, (ii) the link between ICTs and health in LMICs, and (iii) the EU approach for promoting ICT diffusion in LMICs:
  - (i) ICT and poverty reduction: ICTs had become an essential component of modern life in developed countries and LMICs alike. However, access to ICT benefits and opportunities was unequally distributed across and within nations. Even if ICTs could positively affect society as a whole, they were not sufficient to guarantee a positive impact on economic development and especially on poverty and inequality reduction. A series of conditions had to be fulfilled depending on a combination of technical, political and cultural factors, including the choice of technology, overcoming resistance to change, lack of local capabilities, and institutional support for developing competitive telecommunications markets.
  - (ii) ICTs and health in LMICs: Most evaluations of the impact of eHealth projects in LMICs focussed on the projects' outcomes and processes, rather than on providing evidence of clinical impacts. At the most basic level, poor telecommunications and electricity infrastructure hampered a more widespread and efficient use of ICT in health systems. Specific constraints related to uncertainty about the lack of policy support and incomplete legal frameworks (concerning e.g. ownership, confidentiality and security of data), skills shortage and insufficient interoperability of health information systems. Finally, implementation of eHealth in LMICs appeared to be strongly donor-driven.

- (iii) The EU approach for promoting ICTs in LMICs: The lack of a central repository of initiatives related to ICT for development made it difficult to reconstruct the contribution of EU institutions in promoting ICTs in LMICs. EU intervention in support of ICT in LMICs could be grouped in four main areas: (a) support to the development of ICT infrastructure, (b) harmonisation and alignment of ICT-relevant policy and regulatory frameworks, (c) establishing national research and education networks of EU Member States and LMICs, and (d) ICT capacity-building initiatives.
- The speaker went on to say that they had carried out an online survey among 145 experts in the field of development cooperation and ICT, and used the results to develop four policy options:
  - (i) Reduce EU support to ICT for development in LMICs. Given the fast spread of mobile telephone technologies and the increased availability of locally developed ICTs in LMICs, the experts believed that, although specific interventions in health, education, agriculture and microfinance could better address poverty alleviation, it would not be advisable for the EU to reduce its support to ICT in LMICs.
  - (ii) Keep a top-down approach. Traditionally the core of EU interventions in ICT for development was characterised by a top-down approach, addressing policy and regulatory frameworks or supporting the construction of infrastructure. Given that EU Institutions had already gathered experience in these ambits over the years, there was an added value for the EU to maintain this approach.
  - (iii) Move towards a bottom-up approach. Bottom-up initiatives could address directly the poorest and make it possible to involve local actors in the decision-making process. As it emerged throughout the analysis, poor sustainability is a major risk in adopting this approach. To be successful, bottom-up initiatives had to be built on a deep understanding of local contexts and seek government approval.
  - (iv) Balance a bottom-up and top-down approach. This approach was suggested by a majority of the surveyed experts. This would expand the range of possible interventions for EU development cooperation in this area, so that the most appropriate mix of initiatives could be finally chosen.
- Then the Chair gave the floor to interested Members for questions/discussion:
  - Ms Mady DELVAUX, MEP and STOA Panel member, asked about the differences between men and women in ICT accessibility and the level of women's skills in ICT in the LMICs.
  - Ms DELPONTE answered explaining that most of the employment opportunities for women were not within the ICT sector itself, but resulted from its enabling functions.
  - The Chair enquired about the possibility of mapping out mobile applications in different languages.
  - Ms DELPONTE replied that it took time to ensure complete access to these applications for different reasons: access to smartphones, access to Wi-Fi Internet and digital literacy. Most of the content was delivered in English and that was also a barrier for the local populations to access ICT.
- Concluding the discussion, Mr TAMBURRANO underlined that, as European politicians, Members had a lot to learn and to gain from the results of this study. He emphasised that there were many people around the world who found themselves in a very problematic situation; this work could help to better understand these difficult conditions, but also the opportunities for innovation in LMICs.
- The Chair emphasised the relevance of the study and the importance of making it available to European Parliament bodies. He asked Panel members to disseminate it through social media platforms.

#### **4. Update on STOA projects**

##### **4.1. Update on ongoing projects**

- The Chair gave the floor to Mr Theo KARAPIPERIS, Head of the Scientific Foresight Unit (STOA), who recalled that, before the summer, the Panel had approved a number of projects and now offers were expected for five of these projects: two Scientific Foresight projects, on 'Precision agriculture' and 'Assistive technologies for people with disabilities', and three Technology Assessment studies, on 'Circular economy and waste management', 'Cyber-security in Common Security and Defence policy' and 'Impact of technologies on the social economy and the labour market'. These projects were going to be launched by the end of the year. An internal study on 'The effect of microwaves in humans' was in a preparatory phase.
- The Chair gave the floor to Ms DELVAUX and Ms VAN WOENSEL, Head of the Scientific Foresight Service, for an update on the Scientific Foresight project 'The Ethics of Cyber-Physical Systems'.
- Ms DELVAUX updated Members on the activities of the Legal Affairs (JURI) Committee's Working Group on Robotics, which had been looking into the implications of the use of robotics in law, legislation and ethics, and was waiting for the publication of the STOA report and feedback from the experts.

- Ms VAN WOENSEL explained that the project was advancing well and seven ‘trends reports’ on different robotics applications would be delivered by December. The next steps in the project were two workshops: one, looking to the future and at possible impacts of robots on society, was scheduled for Thursday, 14 January 2016; the second was planned for Thursday, 18 February 2016, and would focus on the development of possible future scenarios for robotics. Panel members would be invited to participate.
- Ms VAN WOENSEL also explained that, as this was a first pilot project, there was a need for competence building within the Scientific Foresight Unit (STOA). The Secretariat was therefore proposing to conclude a support contract for competence building in foresight and scenario development, which would also cover the monitoring of the Scientific Foresight process. She further explained that, at the end of the project, there would still be a need to communicate the results to the Members in a focussed way. For this purpose, face-to-face discussions with Members on the outcomes were envisaged. To have an efficient tool for exploring the outcomes, the Secretariat was proposing to conclude a contract for the development of an interactive tool to support Members in elaborating the study outcomes in the context of their interests and activities.
- The Chair announced that, as there were no objections, the Secretariat would proceed with the contracts.
- He then gave the floor to Ms Eva KAILI, MEP and First STOA Vice-Chair, for an update on the MEP-Scientist Pairing Scheme.
- Ms KAILI explained that, on 21 September 2015, the Secretariat had addressed an e-mail to all Members asking those interested to select a scientist they would like to be paired with and communicate this name to the Secretariat, preferably by 12 October 2015. All relevant information about the individual scientists was made available to the Members. The Secretariat had received until that day 20 indications for scientists to be paired with Members (from the list of 108 selected scientists, out of the total of 326 applications). From the logistical and organisational viewpoint, this number of pairs could be managed internally without significant additional workload. It was proposed that the ‘Brussels week’ take place in the week of 25-27 January 2016.
- Mr Zsolt PATAKI, Head of Service responsible for the STOA Secretariat, added that the Secretariat had already circulated a draft programme the ‘Brussels week’ for Members’ possible comments.
- The Chair announced that, as there were no objections, the Secretariat would implement the MEP-Scientist Pairing Scheme 2015 as described.

#### 4.2. New project proposals

- The Chair gave the floor to Mr KARAPIPERIS to inform Members about the new projects.
- Mr KARAPIPERIS pointed out that Members would find in their dossier two project proposals, one on ‘Search machines: mapping of data collection for reciprocal use’ and a second one entitled ‘Galileo and Copernicus synergies: an opportunity for Europe’. The STOA Bureau had examined the proposals at its last meeting and was recommending their approval.
- The Chair announced that, as there were no objections, the Secretariat would implement the two projects.

### **5. STOA Annual Lecture, 9 December 2015**

- The Chair gave the floor to Mr PATAKI for an update on the latest developments. Mr PATAKI explained that the Chairman has accepted to both chair the meeting and moderate the discussion. He further informed Members that the organisers of the 7th European Innovation Summit had proposed that the Annual Lecture be embedded in the programme of the summit, scheduled for 7-10 December 2015 in Brussels.
- Mr PATAKI reported that Professor Serge HAROCHE had agreed with the concept proposed by STOA for a two-hour session, with a keynote speech, coupled with talks by other scientists from the same discipline and, possibly, projection of a video clip, followed by a Q&A session. Ms Mairead McGUINNESS, Vice-President responsible for STOA, had been invited to present the conclusions of the discussion. Ms KAILI had accepted to make the final remarks.
- The Chair then announced that, as there were no objections, the Secretariat would continue with the preparations along these lines.

### **6. STOA workshops and joint activities with external organisations**

#### 6.1. STOA workshop ‘The impact of organic food on human health’, 18 November 2015, Brussels

- The Chair gave the floor to the Lead Panel Member for the study, Mr Momchil NEKOV, MEP and STOA Panel member.

- Mr NEKOV explained that, as member of the Committee on Agriculture and Rural Development (AGRI), he considered the topic of organic agriculture one of his priorities. He further noted that very little had been done on the impact of organic food on human health and he wanted the workshop to be useful both from a scientific and from a general public point of view, by bringing together a diverse group of relevant experts to summarise the findings of a number of studies in this field, and explain the link between organic production methods and the qualities of natural products.

- The Chair recommended inviting the members of the AGRI Committee to attend the event and announced that, as there were no objections, the Secretariat would continue with the preparations for the workshop.

#### 6.2. STOA workshop 'eHealth in Europe: reality and challenges ahead', 1 December 2015, Brussels

- The Chair gave the floor to Ms KAILI, who was Lead Panel Member for the workshop.
- Ms KAILI explained that the workshop would provide examples of eHealth applications in different EU countries and look into the bottlenecks that prevented a more intensive application of eHealth in Europe.
- The Chair announced that, as there were no objections, the Secretariat would continue with the preparations along these lines.

#### 6.3. LIBE proposal for a high-level conference entitled 'Protecting on-line privacy by enhancing IT security and EU IT autonomy', 8-9 December 2015

- The Chair gave the floor to Mr KARAPIPERIS, who informed Members that the Committee on Civil Liberties, Justice and Home Affairs (LIBE) was interested in using the findings of the STOA study on mass surveillance as a basis for the discussions in this conference. He further noted that high-level experts were invited to reflect on a possible 'digital new deal' for an IT and online privacy protection strategy of the EU.
- The Chair announced that, as there were no objections, the Secretariat would proceed with the preparations for the conference along these lines, in cooperation with the LIBE Secretariat.

#### 6.4. Proposal for STOA to organise an event within the Brain Awareness Week, 15 March 2016

- The Chair informed Panel members that he had received a request from the Dana Alliance for organising a workshop during the 'Brain Awareness Week' 2016 (14 – 20 March) at the European Parliament.
- The Chair gave the floor to Mr Gianluca QUAGLIO, Seconded National Expert in the Scientific Foresight Unit (STOA), who noted that the Dana Alliance was a well-recognised philanthropic organisation committed to advancing brain research and educating the public in a responsible manner about the potential of research in neuroscience. The idea was to organise an event on the importance of neuroscience in Europe, looking into different sectors: elderly population, childhood and psychiatric disorders.
- The Chair then announced that, as there were no objections, the Secretariat would proceed with the organisation of the workshop as described.

#### 6.5. STS forum European workshop in Brussels, 4 May 2016

- The Chair gave the floor to Mr KARAPIPERIS who reported that the STS *forum* wanted to increase its activities in Europe and, in this context, was interested in co-organising with STOA a workshop on 4 May 2016 at the European Parliament. The STOA Bureau had examined the proposal and recommended the cooperation. The content and format would be decided between STOA and the STS *forum* in due course.
- The Chair announced that, as there were no objections, the Secretariat would proceed with the organisation of the workshop as described, in cooperation with the STS *forum*.

## **7. Visits / External activities**

### 7.1. EPTA<sup>1</sup> Council meeting and Conference, 23-24 September 2015, Paris

- The Chair informed Members that a STOA delegation consisting of him and Ms DELVAUX attended the EPTA Council meeting and Conference, which took place in Paris under this year's EPTA Presidency held by the Parliamentary Office for Evaluation of Scientific and Technological Options (OPECST), STOA's French counterpart. The conference was on 'Innovation and Climate Change' and was based on the OPECST 'Green Paper' on this subject, composed of contributions from EPTA Members, including STOA, and meant to be EPTA's input to the 2015 Paris climate conference. A delegation report was in the dossier.

<sup>1</sup> European Parliamentary Technology Assessment network

### 7.2. STS<sup>2</sup> forum, 4-6 October 2015, Kyoto

- The Chair reminded Members that he had participated in the annual meeting of the STS *forum*, from 4 to 6 October 2015 in Kyoto. On 3 October, before the start of the conference, he attended the 6th EU-Japan Science Policy Forum entitled ‘Foresight for STI<sup>3</sup> policy in an era of accelerated change’, organised by the EU Delegation to Japan and the Japanese National Graduate Institute of Policy Studies (GRIPS). His talk was entitled ‘Scientific foresight for policy-makers: how to work now towards a better future?’.
- The Chair recalled that he held bilateral meetings on the sidelines of the forum, among others, with Dr Yuko HARAYAMA, Executive Member of the Council for Science, Technology and Innovation (CSTI), Professor Michinari HAMAGUCHI, President of the Japan Science and Technology Agency (JST), Professor Takashi ONISHI, President of Science Council of Japan, Professor Takahiro UYEYAMA, Vice-President of GRIPS, and Dr Youngsuk CHI, Chairman of Elsevier. In his view, the STS *forum* was a major event dealing with technology options at a global level, where STOA could play an increasing role.
- The Chair then gave the floor to Mr Joe DUNNE, Acting Director for Impact Assessment and European Added Value in the European Parliamentary Research Service (DG EPRS), who had accompanied him to the STS *forum*, to provide Members with details about the event. Mr DUNNE first spoke about the EU-Japan Science Policy Forum, which dealt with the role that foresight could play in the future. He then reported that the forum had more than 1,000 participants from 92 countries; the Japanese Prime Minister Shinzō ABE opened the conference, whilst French Prime Minister Manuel VALLS and President Obama’s senior advisor on science and technology also spoke at the opening session. He especially dwelled on two interesting concurrent sessions, one, chaired by Mr RÜBIG, on smart cities and another one on robotics. In his view, it had become clear from the discussions that the main issue was that legislation had to keep pace with technological development. A delegation report would be available for the next Panel meeting.

### 7.3. STOA visit to IPTS/JRC<sup>4</sup>, 15-16 October 2015, Seville

- The Chair recalled that a STOA delegation, consisting of him and Mr TAMBURRANO, had visited IPTS. A delegation report was in the dossier. The visit provided STOA with valuable insights for ongoing and future projects, as well as useful direct links to relevant experts in many policy areas of common interest. He concluded by calling for a reinforced cooperation between STOA and the JRC.

### 7.4. STOA participation in the World Science Forum, 4-7 November 2015, Budapest – Update

- The Chair informed Members that, following the authorisation by the President, he would participate as a speaker in the thematic session for parliamentarians entitled ‘Enabling science through parliamentary governance’, to be held on Thursday, 5 November 2015. He further announced that he would also have a number of bilateral meetings on the sidelines of the forum.

## **8. Any other business**

- The Chair announced that the annual ESPAS<sup>5</sup> conference was taking place in two weeks’ time and would be co-hosted by the Parliament and the Commission. As Chair of the STOA Panel, he had been asked to give the opening address to the session taking place in the Parliament, on Friday, 13 November. There would then be three roundtable discussions – on Future Science, Future Society, and Future Geo-politics. Ms DELVAUX had kindly agreed to chair the panel on Future Science. Final details of the event would be circulated shortly. It was a very good sign that STOA was involved in such a lead role and he welcomed it.

## **9. Date of next meeting**

- The Chair announced that the next Panel meeting was scheduled for Thursday, 26 November 2015, at 9:30 a.m., in the same room (LOW N1.4) in Strasbourg, where there would be a presentation by Vladimír ŠUCHA, Director-General of the Joint Research Centre.

The meeting ended at 10:58.

Brussels, 20 November 2015

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<sup>2</sup> Science and Technology in Society

<sup>3</sup> Science, Technology and Innovation

<sup>4</sup> Institute for Prospective Technological Studies of the Joint Research Centre

<sup>5</sup> European Strategy and Policy Analysis System

**ANNEX**  
**List of participants**

**STOA Panel members:**

Mr Rübig, Ms Kaili, Mr Tošenovský, Ms Beghin, Mr Coelho, Ms Delvaux, Ms Jazłowiecka, Mr Lewer, Ms McIntyre, Mr Nekov, Mr Pirinski, Ms Schmidt, Mr Tamburrano.

**Scientific Foresight Unit (STOA):**

Mr Karapiperis, Mr Pataki, Ms Van Woensel, Mr Quaglio, Mr Evrard.

**Other participants:**

Mr Dunne (DG EPRS), Mr Thaler (Assistant to Mr Rübig), Mr Schichl (Assistant to Ms Schmidt), Mr Romano (Assistant to Ms Beghin), Mr Lewis (Assistant to Ms Moody), Ms Thirion (Assistant to Ms Rozière), Ms Tristano (Assistant to Ms Briano), Ms Grahek (JRC), Mr Corsi (European Patent Office), Ms Hartstein (EC, DG ENER), Mr Nevens (EC, DG ENER), Mr Amillategui (Policy Advisor, EFDD), Ms Ramanauskaite (PACE), Ms Wannasek (Visitor).