Contribution of

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Esteemed chair(wo)man, members of the seimas, ladys and gentlemen,

Thank you very much for the kind invitation. I feel very honoured to be able to contribute to this meeting of the Committee for the Future of the Seimas.

I am representing the Office of Technology Assessment at the German Parliament, which advises the Bundestag on matters of science and technology. We analyse the potential of scientific and technological developments and their impact on society in a comprehensive and forward-looking manner.

At the same time I have the pleasure of representing the European Parliamentary Technology Assessment network, an organisation very well known to you, since the Committee for the Future is an associate member of this network since last year.

Holding the presidency of EPTA this year gave us the opportunity to invite the EPTA community to Berlin for a big conference and a council meeting, which took place on Monday an Tuesday this week. There I had the pleasure of meeting Mr Kristijonas Bartosevicius honourable member of the Seimas.

I was asked to talk about the current priorities in our work and in the work of Parliamentary technology assessment bodies in the EPTA network.

Before I do so let me first explain how topics are selected by the various technology assessment bodies. This is helpful in order to put it in the right perspective.

The selection of topics is in fact very different with different EPTA members.

One major reason is that indeed no two EPTA members are alike:

- We have Committees inside the Parliament, where the MPs play a major role in the TA work like in this venerable house, the Seimas, or in Finland or France
- We have evaluation or research services in Parliament who perform TA as one of their duties like in the UK in Sweden or in Japan.
- And finally there are external scientific institutions which advise their Parliaments like in my home country Germany or in Norway, Austria or the Netherlands

And just as diverse as the institutions themselves are their procedures for identifying topics of interest and priority areas

- In some countries this is simply decided by MPs: France, Finland
- In others there are advisory boards with scientists and/or representatives of stakeholder groups (Norway, Netherlands) who discuss and define the work programme

- Other ones use formalised foresight or horizon scanning procedures (GAO in the USA, or the European Parliaments STOA)

Here at the TAB in Germany we use a hybrid approach: we have implemented a horizon scanning method to identify topics that could be interesting for the parliament to address. And we regularly ask all MPs of the Bundestag to provide suggestions for topics. The decision to take up a topic is always taken by a group of MPs, the so called “rapporteurs for TA”.

This means that in our case the priorities for TA and the work programme is defined by the rapporteur group!

Which leads me back to the initial question of what priorities do we have for Technology Assessment in Germany and in the European TA Network.

Portfolio of individual topics clustered around some bigger themes

Transition of the **energy system** away from fossil fuels and towards renewable sources like solar and wind energy. This was already a major issue for many years but of course the current situation which caused turmoil at the markets for oil, gas and electricity in Europe and beyond has emphasised the urgency of the matter.

Topics are

- Hydrogen partnerships with developing countries
- Impact of offshore windfarms on the environment
- Alternative technological pathways for the basic industry (steel, chemical, cement) to produce in a climate friendly way

The energy supply depends on infrastructure, that just a few years ago was thought to simply be there and work basically all the time. Today the awareness that this infrastructure can fail or can be attacked by a malicious actor has increased significantly.

This topic of **critical infrastructure** was one of the main issues at the EPTA conference on last Monday.

- Already 10 years ago TAB has published a seminal report on the consequences of a long-lasting large-scale power blackout. Currently we are dealing with the topic of
- Opportunities and risks of the digitisation of critical municipal infrastructures like water and waste management
- And our colleagues from Austria (ITA), for example, have published a report specifically on the outage of the internet

TA is prepared to support the implementation of an increased resilience of infrastructures by developing scenarios, analyse vulnerabilities and raising awareness of decision makers on the need for action.

As has just been mentioned, there are numerous projects with a focus on the issue of **digitalisation** in all sectors of the economy and in society at large. In many cases there are both opportunities and risks involved. Current priority topics at TAB are:

- Application potentials and challenges of artificial intelligence in education
- Status quo and perspectives of telemedicine
- Potential of mobile internet and digital technologies for a better participation of persons with disabilities in society

- Deepfakes (manipulated or synthetic audio or image media, which have been created with the help of artificial intelligence) legal and societal challenges as well as innovation potentials
- Cybersecurity in the food supply (food production, processing and trade)

Another focus of TABs work is **Biotechnology and health** due to the rather strong scientific and industrial base here in Germany but also because of the very pronounced critical attitude of some societal groups towards gene technology. Recent projects are about

- Gene drives (which are genetically engineered elements that are supposed to be passed on to the next generation with high probability) which are researched for example to combat malaria
- Bacteriophages in medicine, agriculture and food industry (B. are viruses that specifically attack certain bacteria, and therefore can be used as a therapeutic option to fight bacterial infections

In the time available, I have certainly only been able to give you a rough overview of the priorities in the work of the German and European technology assessment bodies.

Therefore, I would like to conclude my speech in the hope that this has only been the first step in the ongoing constructive exchange with you. I am confident that all EPTA members will be very happy to provide you with advice and assistance if you so wish.

Thank you very much again for giving me the opportunity to be here today. I'm happy to answer any questions you may have.