

TA-PROJEKTE

Joint EPTA Project on „Genetically modified plants and foods“

By Rolf Meyer, ITAS/TAB

A new Joint Project of the European Parliamentary Technology Assessment Network (EPTA) on “genetically modified plants and foods” was approved by the EPTA Council¹ in its meeting on October 2006 in Oslo. Objectives of the project are to work out regulatory challenges for the European system in the next years, to identify points of public debate in the future, and to assess appropriate approaches for TA to handle the future issues. The project’s approach consists of a look in the past with project reviews and a look in the future with a questionnaire survey. Initially proposed by Institute for Technology Assessment and Systems Analysis / Office for Technology Assessment at the German Parliament (ITAS / TAB), the EPTA members from Austria, Belgium / Flanders, Denmark, Norway, Switzerland and United Kingdom² have joined the project.

1 Background: Citizens’ Scepticism and New EU Regulations

Biotechnology, and especially genetic engineering, is one of the most controversially discussed modern technologies. This technology is seen on one side as an important key to economic competitiveness growth, and on the other hand provokes concerns about health and safety issues and about ecological impacts.

The first genetically modified organism was produced in 1973. Over the last three decades, great progress was made in modern biotechnologies. Today, they play an important role first of all in medicine and agriculture. The public perception of the bio-medical and agri-food applications has clearly diverged at the same time.

In the year 2005, the estimated global area of genetically modified (GM) (or transgenic) crops was around 90 million hectares. GM crops were grown in 17 countries. Leading country is

the USA with 49.8 million hectares (55 % of global total). The most important GM crop was soybean with 54.4 million hectares (60 % of global GM area) (ISAAA report 2005 – James 2005). The global area of GM crops has grown continually. In contrast to this development, the cultivation of GM crops in Europe is very limited. In the year 1999, a de facto moratorium on GM crops was introduced in the European Union, which was in force until 2004.

Many citizens in the EU are opposed or sceptical about GM food. In the past fifteen years, heated debates about genetically modified plants and food took place in many European countries. These debates have common characteristics and specific national developments. Many TA projects in Europe reviewed and contributed to these debates. They used different approaches, as consensus conferences or scientific assessments. GM crops and foods are a major topic for the EPTA members and associates.

The new European Directive on deliberate releases 2001/18/EC (EC 2001) and the following EU regulations have put into force recently a new frame for GM crops and foods in the EU, including an emphasis on the precautionary principle, an enforced risk assessment, a time limit for authorisations, an introduction of follow-up evaluations and a change in the labelling regime. These laws are especially focused on GM crops commercialized for fodder and for human consumption. The co-existence of GM crops with conventional and organic crops, as well as the labelling and tracing of the GM food products, are actual topics of discussion.

At the same time, a new generation of GM crops, capable of producing medicine, industrial chemicals etc., is emerging. This development leads to new questions for the risk assessment and regulation, and for the discussion on the advantages and disadvantages of these new GM crops.

For the future, central questions are the sustainability of the EU regulation on genetically modified crops and food, and the problems emerging from the operationalisation of the new EU regulation. As important developments, which are or will be challenges for the EU regulation, can be identified:

- technical development of biotechnology: In the future, it will be possibly more difficult

to draw a clear distinction between GM and non GM plants;

- trade conflicts: The EU system (with the labelling of the technology and the precautionary principle) is different to the US system and leads to conflicts within the WTO regulation;
- coexistence: The broader use of GM crops in the EU will raise probably great problems in sustaining the coexistence.

2 Project Status and New Partnerships

Initially, the project was proposed by the Office of Technology Assessment at the German Parliament (TAB/ITAS), and the initiative presented at the EPTA Council meeting in autumn 2005. A first project meeting took place in February 2006. With the decision of the EPTA Council in its meeting 2006, the project received the status of a "Joint EPTA Project". A first project manager group meeting took place on 14th and 15th December 2006 in Bonn, Germany, where the project approach and the undertaking of reviews were further elaborated.

3 Project's Approach

A combination of two major methods is foreseen to achieve the project's objectives: A look in the past with project reviews and a look in the future with a questionnaire survey.

Reviews

The reviews will include the relevant TA projects of the EPTA members and other important TA activities as national participative events carried out since 2000. An overview of the TA activities on GM crops and foods should be gained with the reviews. The aim is to learn where we are today, how the debate has evolved and which identified challenges are still relevant for the future. The reviews will be drafted by the project participants. The other EPTA members will be asked to contribute with reviews. The project group has drafted a checklist so that the reviews follow a common scheme. Further, criteria for the selection of projects / activities / reports to be reviewed were specified. Studies

only on scientific / technological, economical or sociological issues will not be included.

Questionnaire

The questionnaire is indented as a broader survey on the three objectives of the project. The aim is to collect information and informed guesses from TA practitioners and important people on new challenges in the area of GM plants and foods. It is foreseen to send the questionnaire to all EPTA members. The questionnaire can be filled out by the experts (e.g. project managers) of the member organisation (with feedback from experts) or further distributed by the member organisation to be filled out by five to ten experts (from science, administration, industry, NGOs etc.).

The joint project will focus on GM plants and their use as feed and food, but also include new applications as plant-made-pharmaceuticals or plant-made-industrials. GM animals are not included, because totally other risk and ethical problems arise from them and a use for food production is not expected for the next years.

4 Project's Work Plan and Work Progress

Overall, the work plan foresees the following working steps for the Joint Project on GM plants and food, which will end in April 2008:

- review phase (November 2006 – March 2007),
- questionnaire phase (April 2007 – August 2007),
- evaluation phase (September 2007 – December 2007),
- final report phase (January 2008 – March 2008),
- dissemination phase (starting April 2008).

From TAB/ITAS, Armin Grunwald, Rolf Meyer and Arnold Sauter participate in the project manager group. Rolf Meyer has taken over the project coordination.

All EPTA members and associates are invited to take part in the project on genetically modified plants and foods and join the project manager group. It is foreseen that EPTA members and associate can join the project until the end of the questionnaire phase in September 2007. The Joint Project intends to involve

knowledge and contributions from as many EPTA members and associates as possible, for example by contributions to the reviews and questionnaire, or comments on project papers and deliverables.

Notes

- 1) For further information on the 13 members of the EPTA Council and the four associate members see: <http://www.eptanetwork.org>.
- 2) Institut für Technikfolgen-Abschätzung (ITA), Austria; Teknologirådet – Danish Board of Technology (DBT), Denmark; Teknologirådet – Norwegian Board of Technology (NBT), Norway; Flemish Institute for Science and Technology Assessment, Flemish Parliament (viWTA), Flanders / Belgium; Zentrum für Technologiefolgen-Abschätzung (TA-Swiss), Switzerland; Parliamentary Office of Science and Technology (POST), United Kingdom.

Literature

EC – European Communities, 2001: Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EC. Official Journal of the European Communities L 106, 17.4.2001

James, C., 2005: Global Status of Commercialized Transgenic Crops. International Service for the Acquisition of Agri-biotech Applications (ISAAA) Briefs No. 34. Ithaca, NY

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ICT and Privacy in Europe Abschluss der ersten EPTA-Studie

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Einen gemeinsamen Bericht zur Gefährdung der Privatsphäre durch Informations- und Kommunikationstechnologien haben vor kurzem sechs Mitgliedsinstitutionen des European Parliamentary Technology Assessment Netzwerks (EPTA) abgeschlossen und präsentiert (Klüver et al. 2006). Der Bericht benennt zentrale Herausforderungen für die „informationelle Privatheit“ in modernen vernetzten Gesellschaften und zeigt auch Handlungsoptionen, die zur Lösung bestehender Zielkonflikte beitragen können.

1 Hintergrund

In immer mehr Lebensbereichen hinterlassen wir elektronische Spuren. Derzeit sind es noch PCs, Mobiltelefone und Bankomatkarten sowie Kredit- und Kundenkarten des Handels, mit denen wir mehr oder weniger bewusst Datenspuren hinterlassen. In Zukunft werden es aber auch Gegenstände um uns herum sein, die Daten versenden und das Individuum ortbar und überwachbar machen. Die Vision des Ubiquitous oder Pervasive Computing beschreibt genau dieses „Internet der Dinge“, dessen technologische Basis und Vorreiter in Form von RFID-Chips bereits in die „Sicherheits“-Reisepässe unterschiedlicher europäischer Staaten Einzug gehalten haben. Die technische Entwicklung ist gepaart mit und überlagert von einer (sicherheits-)politischen Debatte, die gesellschaftliche Sicherheit durch verstärkte Überwachung herzustellen versucht. Die angestrebte lückenlose Überwachung findet auch aus ökonomischer Sicht Zuspruch, da bei vollständiger Kontrolle von Warenströmen und Einkaufsverhalten das Angebot, die Werbung, die Lagerhaltung und die Logistik optimiert werden können, was zu geringeren Kosten und höheren Erträgen führen kann. Der allgemeine „Krieg gegen den Terror“, wie auch immer bessere Vermarktungsstrategien bedrohen jedoch manche Grundrechte.