Policy Challenges in the context of GM Plants and Food in Europe

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Background

- Four TAB-projects for the German Parliament over the last 10 years
- Ongoing German discourse project “Scenario building workshops: Futures of green biotechnology”
- Preliminary Results from the joint EPTA project "Genetically modified plants and food"

Aims of the presentation

- scoping of future agendas
- working out emerging challenges for policy on GM plants and food
- identifying areas for action

The presentation will not describe

- the most likely future development
- the most desirable future
- alternative options for action
- a detailed assessment of impacts

Overview

Leading questions:

- Change of driving forces for GM introduction?
- Consequences from international trade conflicts?
- Need for regulatory changes in the context of new non-food GM plants?
- Change of public acceptance?

Challenge: New driving forces for GM introduction

Agriculture is back on the global agenda

- World development report 2008 of the World Bank
- International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD)

Challenge: New driving forces for GM introduction

Potentials of modern biotechnology in developing countries remain controversial

- Can modern biotechnology contribute to growing productivity of small-scale farmers?
- Is modern biotechnology a tool to achieve the Millennium Development Goals as halving hunger?

Challenge: New driving forces for GM introduction

Biomass as a renewable resource, especially bioenergy:

- Increasing biofuel production
- Ambitious goals for future biofuel use
- Breeding of crops for bioenergy more or less at the beginning
- But also: biofuel policies get increasingly controversial

Challenge: New driving forces for GM introduction

Overall demand for introducing GM plants in the European agriculture:

- More factors encouraging demand
- Higher agricultural prices encourage productivity growth
- Environmental and health issues remain on the agenda
- Conflicts between different sustainability goals

Area of action in the context of changing driving forces:

- Broad societal dialogue on future sustainable European agriculture in a global context
- Only there within the future role of GM plants in Europe can be answered

Challenge: International trade conflicts

International developments:

- Increasing global GM crop use and global trade of food and feed
- Recent WTO conflict between the US and its allies, and the EU, with the precautionary principle in the centre
- Ongoing differences in international GMO regulation (Cartagena protocol etc.)
- Failure of Doha round WTO negotiations

Challenge: International trade conflicts

Assessment of future developments:

- Robustness of general principles and approaches of the EU regulation
- But restrictive practices of individual EU Member States challenged
- Future shaping of the entire WTO system on the agenda

Challenge: New food and non-food GM plants

Most important classes of new GM plants:

- GM plants for production of industrial materials and bioenergy
- GM plants for pharmaceuticals
- GM plants for healthier food

Challenge: New food and non-food GM plants

Public acceptance of new GM plants:

- Predominantly beneficial (GM plants for medicine and industrial use)
- Precondition: as long as environmental or health hazards are not involved and new GM plants do not pollute more than the corresponding traditional modes of production or better alternatives

Challenge: New food and non-food GM plants

Uncertainties regarding technological development and market introduction:

- Technological break through in many cases open
- Advantages against various alternative production platforms
- New risks from gene flow or outgrowing and contamination of ordinary staple food

Challenge: New food and non-food GM plants

Resulting area of action / Research policy:

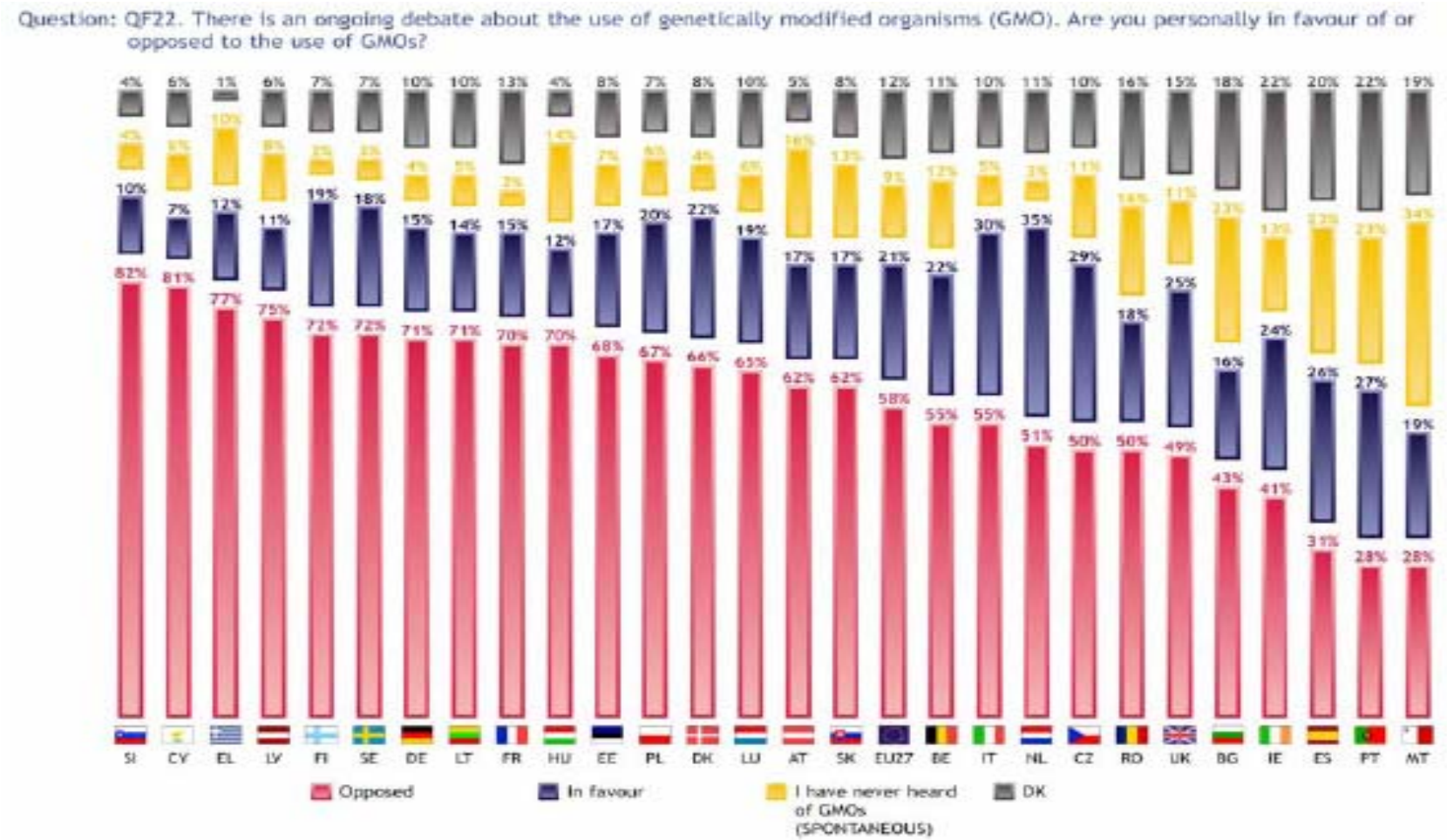
- Early development of scenarios for the introduction of new GM crops in the European agriculture and for appropriate coexistence schemes

Challenge: New food and non-food GM plants

Resulting area of action / Regulatory challenges:

- New parameters for risk assessment and management
- Confinement and/or containment measures
- Regulation of coexistence and liability

Challenge: Public opinion – considerable uncertainties



Challenge: Public opinion – considerable uncertainties

Factors influencing future public acceptance :

- Benefit expectations on non-food GM plants
- "Naturalness" of food products
- Health and environmental risk issues
- Confidence in authorities of importance
- Policy and regulation recognised as fair

Challenge: Public opinion – considerable uncertainties

Expectations on future development of public acceptance:

- Public attitudes towards new GM non-food products could become more positive
- Acceptance of new GM food products will probably remain difficult
- Considerable differences between the EU member states

Challenge: Public opinion – considerable uncertainties

Resulting area of action:

- Dialogue on potential chances and possible problems should be kept on-going