

# Technology Assessment at the German Parliament

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## Two models of Technology Assessment

The “Pre-TA”, positivistic (or technocratic) model of decision making:  
Policy making is informed (guided) by Science to a one best solution of the problem  
at stake



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> Reflexive Modernization:  
Cognitive uncertainties and normative ambiguities are unavoidable

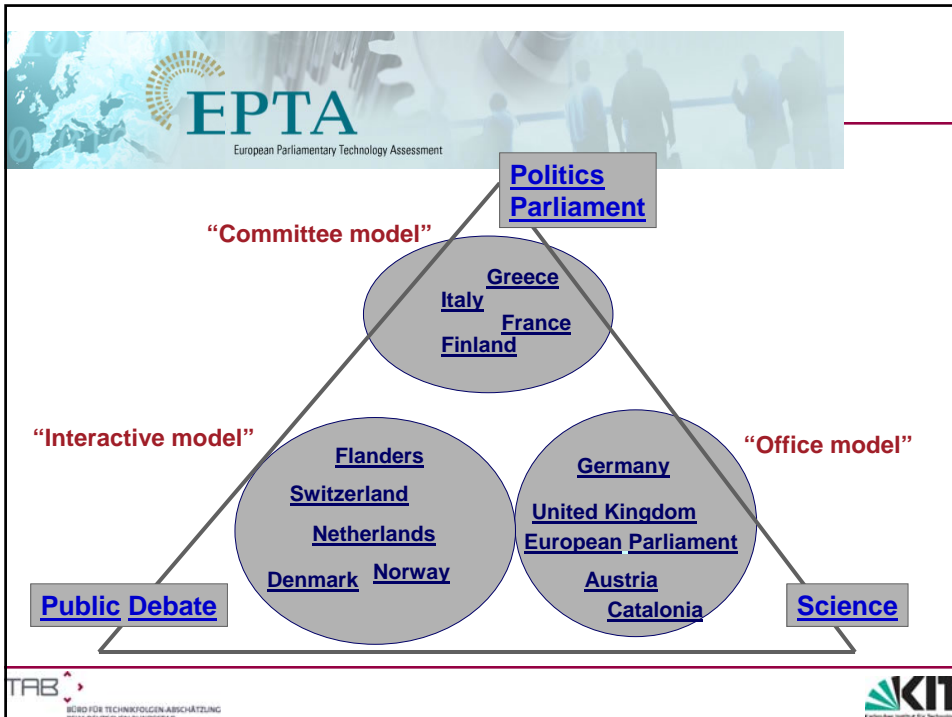
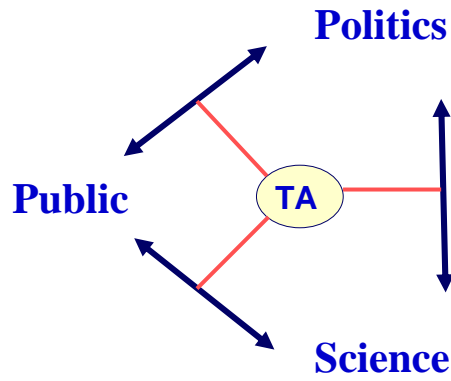
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> TA as an answer to the crisis of the technocratic Model

<p style="text-align: center;">↓</p> <p><b>Policy Analysis Model</b> Expand the scientific knowledge base of decision making by employing different scientific perspectives and disciplines</p> <p>Take account of different values and interests</p>	<p style="text-align: center;">↓</p> <p><b>Deliberative Model</b> Expand the normative basis of decision making by involving different social perspectives, interests and values</p> <p>Deliberate on best ways of problem solving in the light of scientific knowledge</p>
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## Intermediate Role of TA



## TA at the German Parliament – History

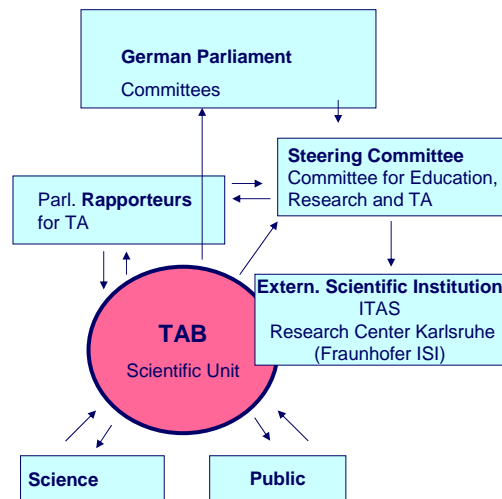
- > discussion on TA in the Bundestag since 1973
- > institutionalisation of TAB by law in 1989
- > main idea: contract of the German Bundestag on the operation of TAB with an external organisation
- > duration of contracts: five years (after pilot phase 1990–1993)
- > since 1990 operation of TAB by ITAS (Institute for Technology Assessment and Systems Analysis) which is part of Forschungszentrum Karlsruhe
- > since 2003 institutionalised cooperation with FhG-ISI
- > annual budget 2 Mio. Euro, including budget for subcontracting and external expertises

## Mission

Advising the German Bundestag by

- > analyzing the potentials of new scientific and technological developments and exploring the associated opportunities
- > examining the framework conditions of new scientific and technological developments
- > analysing their potential impacts in a comprehensive forecast
- > developing alternative options for action possibly to be taken by parliamentary decision-makers

## TA at the German parliament



## Types of Activities

- > *TA-Projects*
- > Explore potentials of scientific and technological development
- > Analysis of legal, economic and social conditions for implementation of innovations
- > Comprehensive analysis of impacts
- > Develop alternative options for shaping of technology development and implementation
- > *Monitoring*
- > Observation of trends in S&T and of related societal developments
- > *Concepts and Methods of TA*
- > Contribute to the scientific discussion on TA (its goals, mission, methods, function and performance)
- > *Policy Benchmarking, Future Reports, Innovation Reports*

## Running Projects

([www.tab-beim-bundestag.de](http://www.tab-beim-bundestag.de))

- > Electric mobility
- > White Biotechnology – Present status and future perspectives
- > Ecological farming and biomass production
- > Application potential of remote sensing for developing countries
- > Electronic petitioning and modernisation of petitioning systems in Europe
- > How can research contribute to solving the problem of world food?
- > International competitiveness of the European economy: nanoelectronics
- > Future potentials and strategies of traditional industries in Germany
- > Reproductive medicine: Scientific technical developments, consequences and general conditions of use
- > Regulations for access to the information society
- > Pharmacological and technical interventions for improving performance (»Enhancement«)
- > Renewable energy sources to secure the base load in electricity supply
- > Status quo and perspectives of the military use of unmanned platforms
- > Hazards and vulnerability in modern societies – large-scale outage in the electricity supply
- > Innovations in medical technology – Challenges for research, health care and economic policy

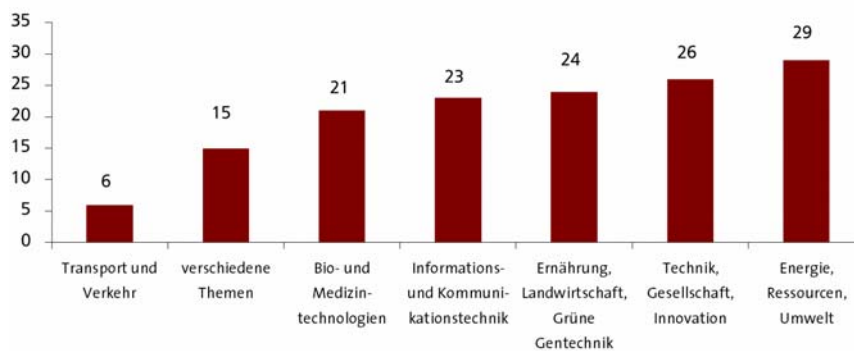


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## Thematic focus of TAB reports (1991 – 2009) (BT-Drucksache 17/3010)

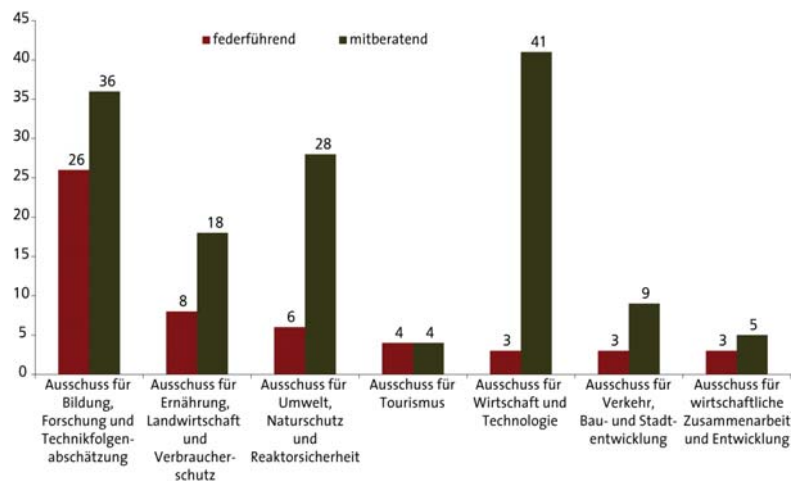


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## Parliamentary committees concerned with TAB studies (1991 – 2009)



## Working Procedures I

### Pre-project phase (Science and Policy makers)

- > Definition of subject by parliamentary committees
- > Project outline by the scientific unit
- > Discussion with group of rapporteurs (Consensus Principle)
- > Decision on project by steering committee (prepared by group of rapporteurs for TA)

## Working Procedures II

### Project phase (Duration: one up to two years)

- > Further clarification of questions to be analysed (together with rapporteurs of the committee that initialised the project)
- > Collection of information (subcontracts with external experts, stakeholder and expert workshops, interviews, desktop research)
- > Report on results and outline of policy making options
- > Comments by experts/stakeholders
- > Approval of report by rapporteurs

## Working Procedures III

### Post-project phase -Formal treatment of TAB reports in parliament

- > Approval of report by Research Committee and Committee responsible for the project
- > Dissemination by the scientific unit
- > Decision on publication of report as an official “printed matter” of the parliament (Research Committee)
- > “First reading” in plenary (formal)
- > Consultation of the report in committees asked for opinion
- > Recommendation for policy conclusions by responsible committee and Research Committee
- > Plenary debate and final decision

## Utilisation of TAB reports

- > **Background-knowledge**
- > **Legitimation of policies**
- > **Support and initialisation of parliamentary activities**
- > **Influencing policy formulation (governmental R&D programs)**
- > **Filter of policy options (decision making)**

## Benefits and problems of the TAB model

- > **Benefits**
  - Clear division of competences between politics and science
  - Information tailored according to the needs of parliament
  - Access to TA capacities not restricted to one committee
  - In-depth and non-partisan analysis of policy making problems
- > **Problems**
  - Relatively weak links with public discourse, relatively low public visibility
  - Restricted time resources for parliamentary debate on TA-reports
  - Contradictory political demands (in-depth analysis and quick results)