

CSPO DC - New Tools for Science Policy

Inspirations from European Technology Assessments:
Institutions, Practices and Key Debates

Anja Bauer

TA & Me



Thinking in the Long-Term:
Anticipatory Policy Advice in Strategic Environmental
Assessment, Technology Assessment, and Foresight

Doctoral
Critical Policy Studies, 2013
Vol. 7, No. 1, 18–36. <https://doi.org/10.1080/19460171.2012.745992>



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Whose look into the future? Participation in technology assessment and foresight

Anja Bauer*

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*Institute of Geo and Life Sciences
Geography, All

Items 101 (2010) 36–45

Co-advisors:

a.o. Univ. P.



Prof. Dr. M.

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Reviewers:

Prof. Dr. U.

PD Dr. P.

When is the future? Temporal ordering in anticipatory policy advice

Anja Bauer*

Technological Forecasting & Social Change 139 (2019) 122–41

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Policy advice in technology assessment: Shifting roles, principles and boundaries

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"Are You a TA Practitioner, Then?" – Identity Constructions in Post-Normal Science

Karen Kastenhofer · Anja Bauer*

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Abstract:

Technology assessment (TA) is a paradigmatic case for the manifold and, at times, ambiguous processes of identity formation of researchers in inter- and transdisciplinary settings. TA combines the natural, technical, and social sciences and follows the multiple missions of scientific analysis, public outreach, and policy advice. However, despite this diversity, it also constitutes a genuine community with its own discourses, conferences, and publications. To which extent "being a TA practitioner" also provides for a genuine scholarly identity is still unclear. Building on interviews with technology assessment practitioners at an academic TA institute, we ask what intertransdisciplinary identification patterns emerge in this field. Our analysis shows that TA practitioners adopt multiple identities, from "enthusiastic TA practitioner" to "strong interdisciplinary" or "disciplinary" – with distinct identity troubles inherent in all these options. We find that generational affiliation plays a vital role in identity formation. It relates to different primary orientations (research or advisory practices), inter-disciplinary backgrounds, research,

ÖAW

ITA



Uni Klagenfurt, © Arnold Pöschl

Overview

- **Context:** The story of European TA begins with OTA
- **Aim:** Reversing the perspective – inspirations form European TA
- **Structure:**
 - The European TA Landscape
 - Key Debates
 - Democratization of expertise
 - Politics of TA
 - Relation to RRI
 - Discussion



EUROPEAN TA LANDSCAPE

How familiar are you with European TA, the institutions and activities?

- 1 – I am interested, but have hardly heard anything about it
- 2 -
- 3 -
- 4 -
- 5 - I regularly talk with European TA practitioners, attend their conferences, read their papers



OPECST



Panel for the Future of Science and Technology (STOA)
European Parliament

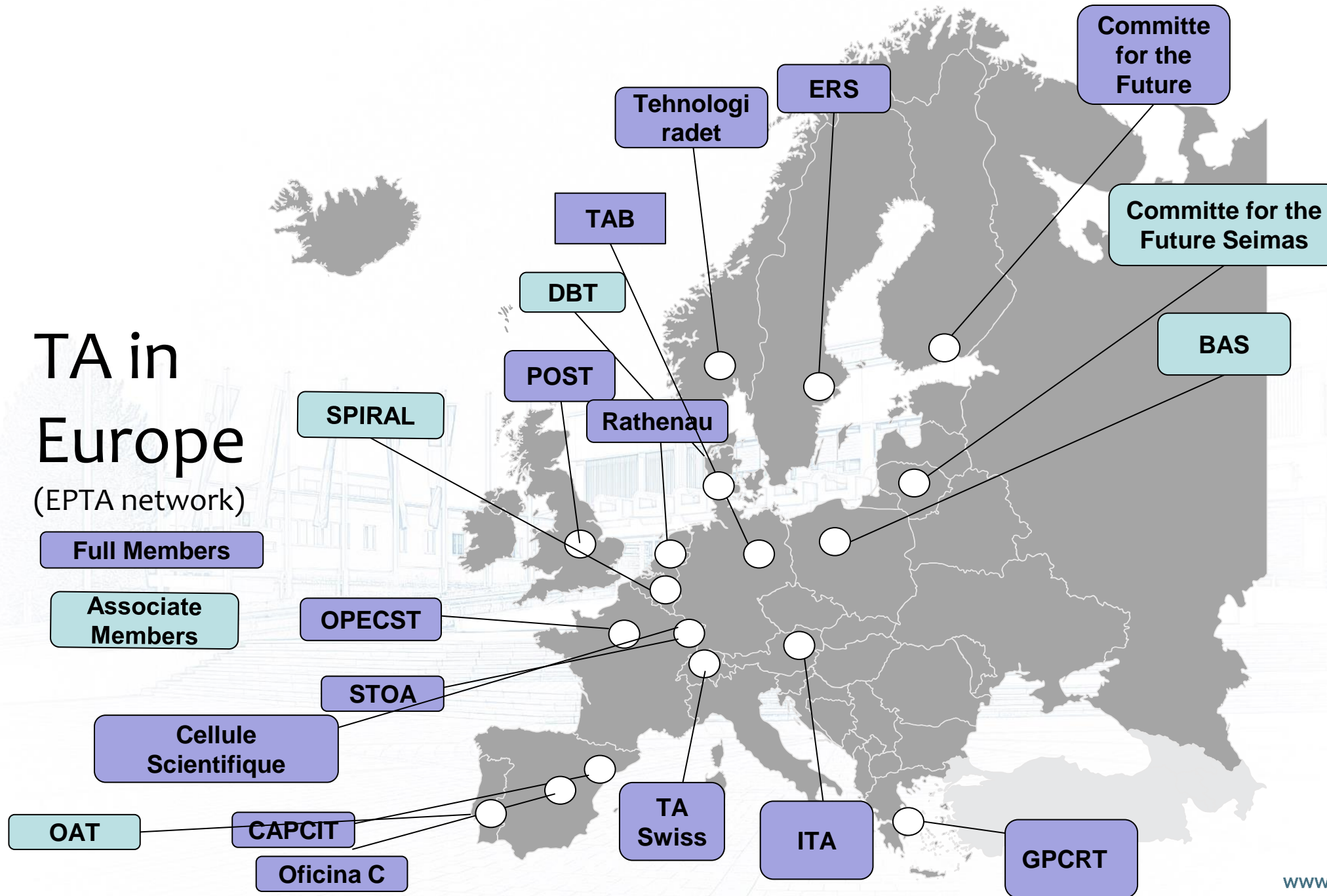


TA in Europe

(EPTA network)

Full Members

Associate Members



TA in Europe

(EPTA network)

Full Members

Associate Members

ERS

Committe for the Future

Committe for the Future Seimas

BAS

TAB

POST

OPECST

STOA

Cellule Scientifique

CAPCIT

Oficina C

GPCRT

Office of Technology Assessment at the German Bundestag (TAB)

- Founded in 1990
- Operated by ITAS/KIT (contract-based)
- Political steering - Committee on Education, Research and Technology Assessment (ABFTA)
- Initiation through any committee or parliamentary group
- Expert-based analyses (often external)
- Review and comments on final reports by TA rapporteur group
- Consensual approval by ABFTA
- TA report - publication of the Bundestag

Biotechnology and health

Projects related to innovative bio- and medical technologies as well as health care issues

[MORE](#)

Digital society and economy

Projects related to technological change in the living and working environment

[MORE](#)

Energy and environment

Projects investigating energy supply, resource use and the environmental impact of technology

[MORE](#)

Infrastructures and security

Projects related to (critical) infrastructures and security technologies

[MORE](#)

Agriculture and food

Projects related to agriculture and genetically modified crops, as well as issues related to the future of food

[MORE](#)

Foresight

Our forward-looking analysis with a focus on innovation and resilience.

[MORE](#)

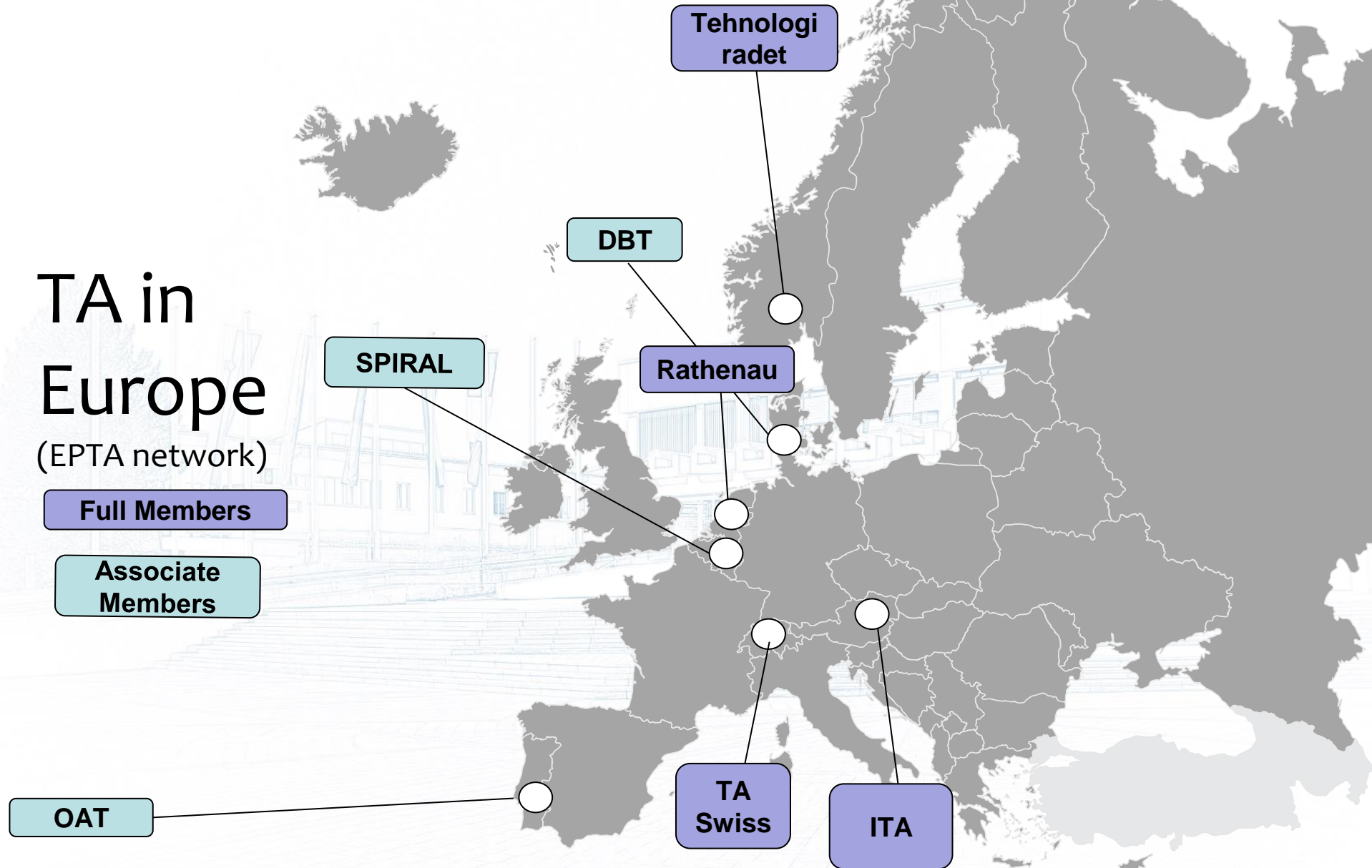
<https://www.tab-beim-bundestag.de/english/topics-and-projects.php>

TA in Europe

(EPTA network)

Full Members

Associate Members



Rathenau Instituut



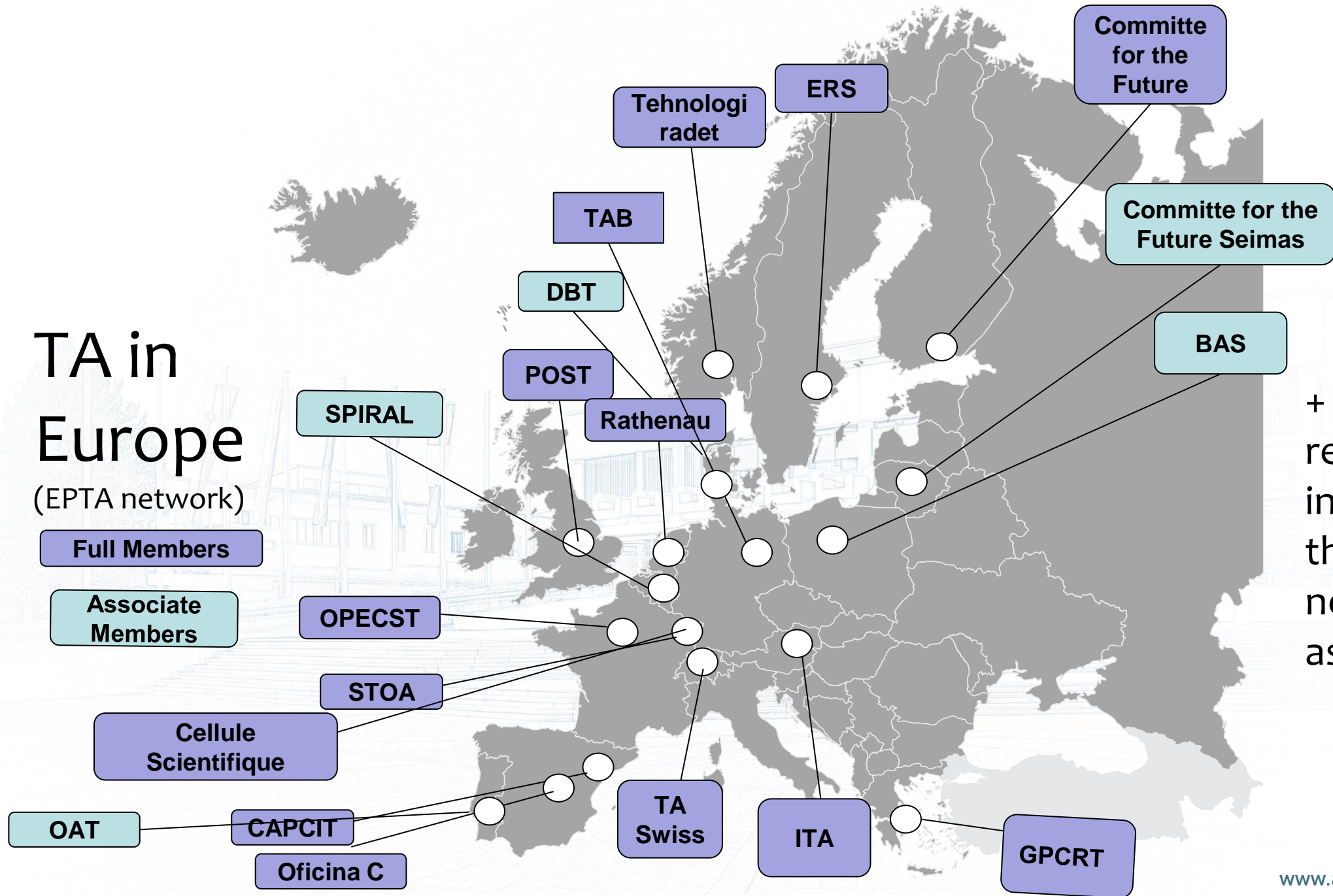
- Founded in 1986 by the government
- Attention to the general public and politics - the Upper and Lower House and the European Parliament
- Focus on research and dialogue relating to the societal aspects of STI
- Own research agenda based on work program and third-party requests
- Programme council and board (academia, NGOs, media, etc.)
- Leading in developing and applying participatory methods
- <https://www.rathenau.nl/en>

TA in Europe

(EPTA network)

Full Members

Associate Members



+ additional research institutions, think tanks, networks, associations

Varieties in Boundary Arrangements

- Organizational embedding
- Access to parliamentary consultation processes
- Freedom and independence in deciding on topics and activities
- Orientation at scientific community
- Emphasis on participation and various publics
- Size and equipment

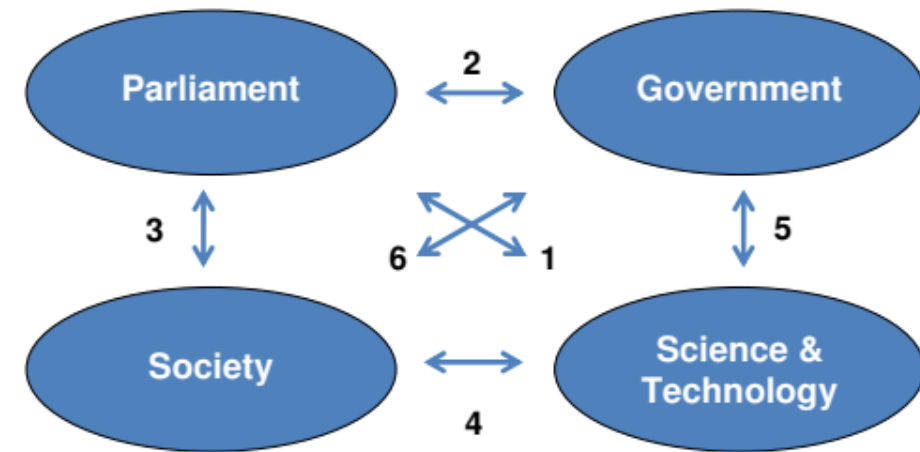


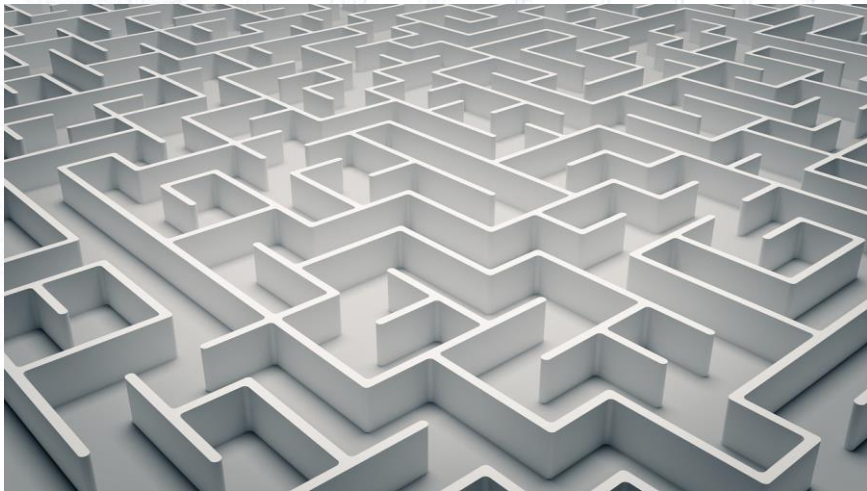
Figure 2.2 (Parliamentary) TA between parliament, science & technology, government and society

Ganzevles & van Est (2012)

Summary European TA landscape

- TA as well-established institution, part. in Western and Northern European countries
- Broad variety of institutions, approaches - > parliamentary expertise and beyond
- Not „untouchable“, risk of losing political support: Abolishment of parliamentary DBT 2011 -> Restructuring in DBT Foundation
- TA in Eastern Europe – weakly institutionalised

Debates



- Democratization of expertise
- The politics of TA
- New governance approaches –
Responsible Research and Innovation



DEMOCRATIZATION OF EXPERTISE

“POST sources reliable and impartial scientific research evidence for the UK Parliament”.

(<https://post.parliament.uk/about-us/>)

“TA throughout its history has been held suspicious of both, being just another mode of technocratic politics as well as being exactly a democratic antidote to technocracy” (Kehl et al. 2021)

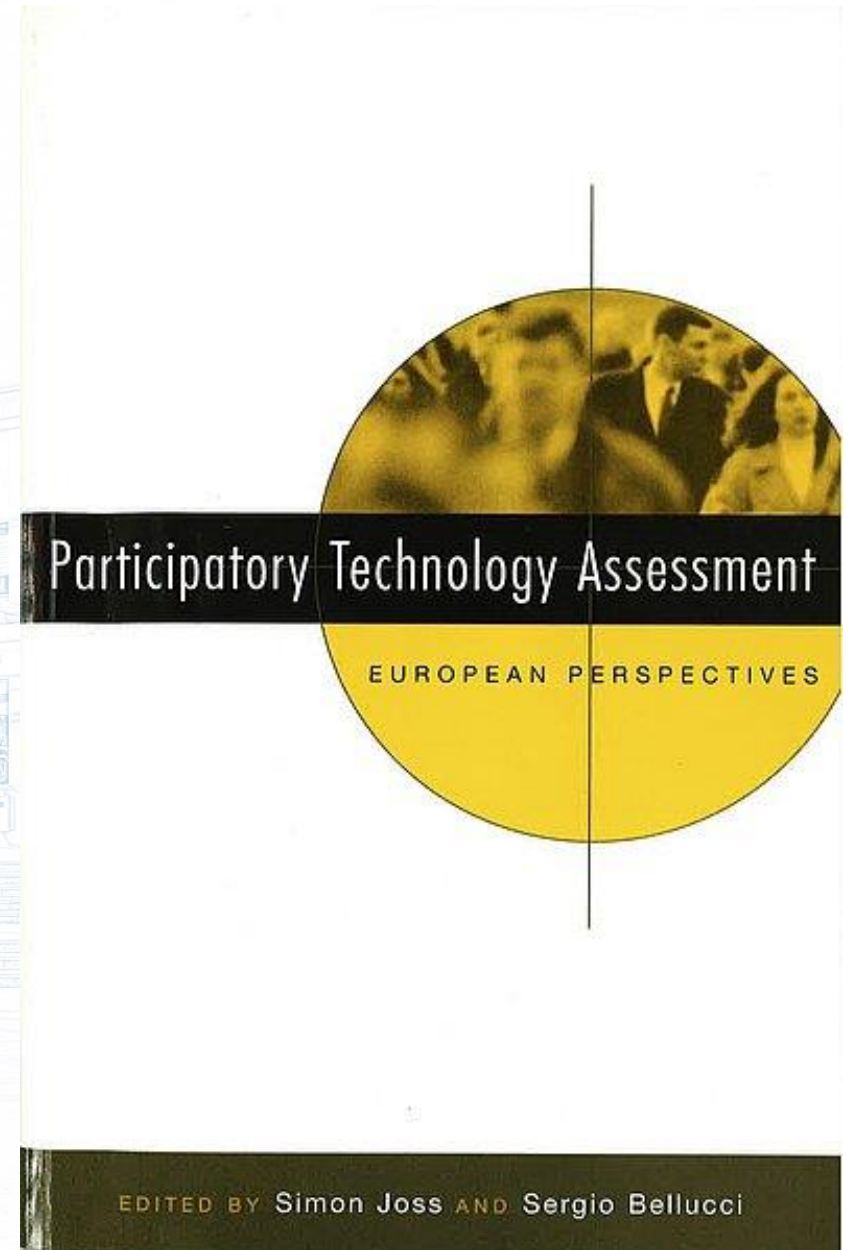
Two sides of European TA

“The Rathenau Instituut supports the formation of public and political opinion on socially relevant aspects of science and technology. It conducts research on this subject and organises debates on science, innovation, and new technology”.

(<https://www.rathenau.nl/en/about-us/what-we-do>)

Advancing participatory TA

- TA as part of deliberative turn, leading DBT, Rathenau
- Participatory or deliberative TA as distinct from expert-based TA
- Attention to the ambiguities, contradictions and blind spots of expert knowledge
- Broadening the methodological canon
- Broadening actors involved
- Broadening the function and definition of TA -> mediator in societal debates



Persistent questions

- Purpose of participation: democratization, knowledge, legitimacy – towards pragmatism (Bogner 2021)?
- pTA as democratization or methodological toolbox
- Epistemic validity and hierarchies
- Legitimacy
- Power relations
- Political cultures and structures



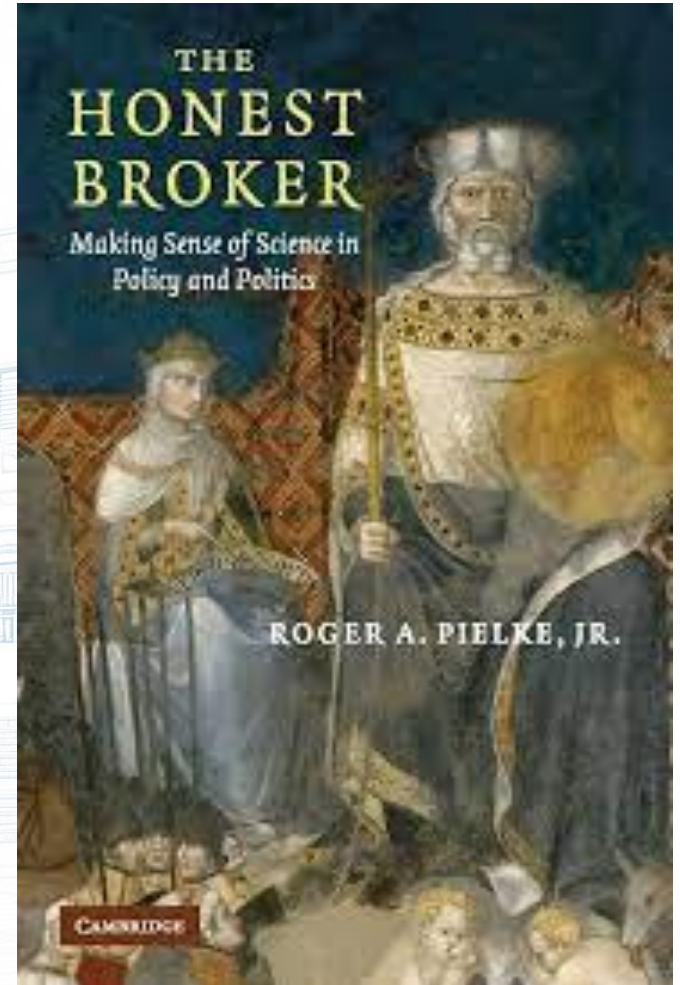
<http://www.civisti.org>



THE POLITICS OF TA

TA as honest broker

- Neutrality as a central narrative in the establishment of parliamentary TA
- TA as honest broker
- Effective boundary management to avoid politicization



Challenges to the neutrality narrative

Technological Forecasting & Social Change 139 (2019) 17–22



The politics of technology assessment[★]

Introduction to the special issue of “Technological forecasting and social change”

Leonhard Hennen^{*}, Linda Nierling

Institute of Technology Assessment and Systems Analysis (ITAS), Karlsruhe Institute of Technology (KIT), Germany

1. Introduction. The neutrality narrative and the politics of TA

From its beginnings in the 1970s, the concept of Technology Assessment (TA) has been strongly bound to and legitimated by the “neutrality” narrative. Being apolitical in the sense of restricting itself to the role of a “knowledge broker” and refraining from taking a strong political stance in terms of recommending specific political action has been at the core of TA’s understanding of policy advice – in particular in the context of parliamentary TA. The commitment to non-partisan policy advice as a core of TA’s self-concept can be regarded as having been supportive in establishing TA at governments and especially parliaments in a societal situation that was characterised at the same time by growing relevance of scientific expertise in policy making and in-

debates and organising stakeholder and citizen participation in S&T policy (cf. Decker and Ladikas, 2004; Joss and Bellucci, 2002; Van Est et al., 2015). Nevertheless, they all share with varying focus and weight the dedication to scientific policy advice and public deliberation of S&T issues including all affected stakeholders and groups. And they share – although with different accent – the commitment to refraining from being connected to a particular political position in societal debates and thus restrict themselves to the role of a facilitator of informed public debate as an “honest knowledge broker” (Pielke Jr., 2007). It is quite clear that this commitment to “neutrality” especially in the parliamentary context was historically an important feature in discussions about the establishment of TA at national parliaments. The conditions for policy advice in a legislative parliamentary context – with a client

- **Empirically:** diversity of TA activities and practices – varying distance to politics
- **Paradigmatically:** positivist -> constructivist/reflexive understanding of knowledge, expertise and their politics
- **Politically:** rise of populism and post-truth

“TA has politics“, “TA is politics“

- Clarifying neutrality – redefining neutrality
- Openness and transparency in regards to normative commitments
- Reflecting the ethos of TA: democracy, sustainable development, fundamental rights, (commitment to proper science)
- Recognizing the political role of TA
- TA as „bastion of democratic politics“ in post-truth era (Delvenne & Parotte 2019)





RESPONSIBLE RESEARCH AND INNOVATION

RRI as a new governance concept

- 40 years of TA in Europe - > changing STI governance system, emergence of new tools, concepts, approaches
- 1990s ELSI/ELSA
- 2010s RRI -> EC Framework Programmes

- What relation to TA? What role for TA?



RRI as an area of TA activity

- Defining and refining the concept
- Methodological development and implementation -> societal engagement
- Funding opportunities
- New cooperation partners
- Diffusion of TA ideas (e.g. Eastern Europe)



RRI as a critique of TA

- RRI as a re-appreciation of ethical deliberation and highlighting the ambiguous consultation of stakeholders
- TA has ignored moral ambiguity
- New role of stakeholder participation
(van Lente et al. 2017)

RRI

?

TA

RRI as a travesty of TA

- RRI – innovation as a social good, deflects attention from the ‘social bads’ of innovations
- TA could be reduced to the role of a mere provider of ex-ante impact assessments
- RRI – potential endangerer for TA institutions in the long term
(Delvenne 2017)

Concluding summary

- European TA – inspiration from OTA, not duplication
 - Coexistence of various institutions, models and approaches from the outset
 - Plurality of modes and activities of TA (expert-TA, participatory TA)
 - Coexistence of modernist orientation with more reflexive orientations (politics)
 - Varying opportunities and challenges in changing STI governance (RRI)
-
- Formal legislative TA bodies quite stable over time in institutionalization, modes, activities, paradigms
 - Institutionally independent TA institutions – add variety to the modes of TA and drive debates within European TA community, more affected by new tools, concepts

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Thank You!



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