How can TA [Technology Assessment] contribute to government policy?

1. TA activities

TA designates activities conducted to map out and analyze the consequences of scientific and technological developments for society and for public administration, and to publicize these consequences and developments among the citizenry, politicians and public administration. Activities to achieve this include, among other things, scientific research, research journalism, organizing meetings with broad citizen participation and meetings of experts, presenting results to public administrative bodies, politicians and society at large, giving information to the media and to NGOs, and organizing and promoting public debate on these issues.

2. What kind of contributions?

The goals for the contribution TA can make to politics and public administration are:

1. Preventing social and political unrest and conflicts associated with developments in science and technology.
2. Building up and strengthening trust between society, government, science and technology.
3. Strengthening democratic arrangements in science and technology.
4. Mediation in conflicts and controversies between society, science, and public administration.
5. Taking care of international embedding and coordination.
6. Contributing to science policy studies, for example the Foresight and other exploratory studies.

Regarding 2.1 Preventing social unrest
TA tries to make its most significant contribution in early and well-documented identification of new developments in the field of science and technology, and of changes in socio-technological systems like energy management, water management, agriculture, and public health. In Technology Assessment, those trends and developments are highlighted and described which are considered to entail significant societal changes, and which may lead to breaches of trust regarding new risks, moral values, and to unrest and political concern about the scientific system in general. The contribution TA can make consists of early and well-documented descriptions, and putting forward proposals to public administration and politicians to put these developments on the policy agenda. By supplying an early description, public administration will have the time and the opportunity to formulate an agenda, to get to work on the identified problems, and in doing so find and strengthen its connections to society.

Regarding 2.2 Building up and strengthening trust
Many problems have to do with the way in which new developments test our cultural and philosophical views and our ideals, our moral values, or the way in which they trigger significant changes in societal relations. In democratic societies characterized by moral pluralism, these conditions put extraordinarily high demands on the public discourse.
In society and in the public and political domains it is inevitable that a process of conflicts and often lengthy articulation is set in motion. TA however strives to offer a structured agenda for this process, to actively participate in it and to facilitate it, always aiming to strengthen trust between the state, science and society (co-evolution). TA aims to strengthen the process of articulation, dialog and discourse, to create the preconditions for this to happen, and to supply the means to achieve this.

Regarding 2.3 Strengthening democratic arrangements
TA is all about early identification, setting a political and administrative agenda, consciousness-raising among citizens and scientists, and public and political consultations. It deals with problems that have to do with risks, philosophical questions, moral value, and with changes in social relations. Against that background, TA is concerned with direct participation by citizens, NGOs and other representatives of citizen groups involved (broad citizen participation). Active participation of citizens and their organizations is what's important here, and TA offers a wide

variety of possibilities and the means to promote this. Essentially, TA organizations choose an active and interventionist approach by which they act right in the middle of the public discourse arena.

Regarding 2.4 Mediation in conflicts and controversies
This way, TA organizations are in the right position, and possess the knowledge and experience, to find mediation opportunities in order to contribute to the restoration of trust in situations in which parties have become diametrically opposed to each other, in situations in which there is a serious breakdown of trust. Examples of this kind of situation are GMO controversies, controversies about electromagnetic waves and nuclear energy, about sequestration of CO2, and the introduction of HPV vaccination for 12 year old girls. TA organizations can – if given the opportunity by all parties concerned to operate independently and impartially – build bridges and create the conditions to renew the dialogue between the parties.

Regarding 2.5 International embedding and coordination
The societal consequences TA is concerned with will inevitably occur in a lot of different countries. Many European countries have (parliamentary) TA organizations which are united in an international network. This network offers a platform for coordination, cooperation and critical reflection. In this network it's not only TA practitioners who get together, but also the members of parliament who are involved in organizing TA in their own countries. TA organizations are also closely involved with the international research community in the fields of science, technology and society (STS), political philosophy and the ethics of technology.

Regarding 2.6 Contributing to science policy studies
Regarding transitions, innovations, and the science policy studies that relate to them, the added value of TA studies and TA activities is ever growing in importance. By mapping out and analyzing the possible societal implications of innovations and transitions at a relatively early stage, the agenda for a satisfactory societal debate may be given shape. This way, innovations and transitions can more effectively be given an accepted place in society so it will be easier for them to come into effect.

3. **Preconditions**

The most important preconditions are:

1. independence and impartiality
2. transparency and public openness
3. professionalism in dealing with politics and media
4. good contacts with science and technology

Regarding 3.1 Independence and impartiality
Any TA organization which is involved in early identification regarding socially controversial questions, which in doing so strengthens co-evolution, builds up trust, and mediates in conflicts, will have to function independently and impartially, because otherwise the parties involved will not allow the TA organizations to perform these functions. In other words, a good TA institution can't so much as appear to be allied with the powers-that-be. An important exception would be a TA organization that is part of the parliamentary system.

Regarding 3.2 Transparency and public openness
In its relations with the citizenry, the TA organization will always have to be open and honest. Many public debates and participatory procedures organized by the government fail because NGOs and other stakeholders always have reason to suppose that the governmental body organizing or mandating the activity acts from some ulterior motive. The same is true for scientific organizations like scientific academies and departmental advice councils.

Regarding 3.3 Professionalism
TA organizations operate out in the open, in public and political networks and endeavor to identify problems in society and to formulate political and administrative agendas. In order to do that, it is necessary that TA practitioners are familiar with the political and administrative domain and can act authoritatively in the media.

Regarding 3.4 Good contacts
There must be a relationship based on mutual trust with the universities and other research institutions. Good relations must also be maintained with the business community, because both groups may entrust the aforementioned tasks to TA institutions.

4. Positioning

Depending on the positioning, the tasks to be performed will be further worked out and special points of attention may be formulated. For an overview of the European situation, see Laura Cruz Castro and Luis Sanz-Menendez: "Shaping the impact: the institutional context of technology assessment" in M. Decker and M. Ladikas (editors) "Bridges between science, society and policy, technology assessment – methods and impact" Springer Verlag Berlin, 2004, pp 101-127.

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