EUROPTA Project

European Participatory Technology Assessment
Participatory Methods in Technology Assessment and Technology Decision-Making

Executive summary

An increasing importance of participatory technology assessment methods in Europe and world-wide is observed as a consequence of critique and doubts to new developments on science and technology in general, as an answer to questions of uncertainty and inequality in the modern society, and as a new interactive development in policy analysis.

Participatory TA-Methods (PTA) are suggested to be a possible way for a direct, interactive inclusion in the TA process of affected social actors, such as interest groups, consumers and members of the general public, alongside professional experts and policy makers. An increasing number of TA organisations are experimenting and implementing participatory methods, allowing so for a better interaction between the public, stakeholders, experts and policy-makers.

The aim of the EUROPTA project (European Participatory Technology Assessment) has been to advance the understanding of the role of PTA, to help furthering the development in PTA practice, and to give guidance for the implementation of participatory methods as a support function for public discourse and decision-making. A comparative analysis of the practice and experiences of PTA of the involved countries (Denmark, Germany, Great Britain, Holland, Austria, Switzerland) was carried out. A minimum of two case studies were carried out in each country (16 altogether).

Two international workshops have been held as part of the EUROPTA project. The aim of the two international workshops was threefold, namely to make the findings of the research carried out under this project available to the wider research community, diffuse the idea of and debate about PTA and at the same time to get feedback about the team's work.

In order to set a common working-grid on the submitted case-studies, a research framework was established. This framework involves a theoretical framework, an analytical framework and a research protocol.

The function of the theoretical framework was to establish a more comprehensive and integral understanding on the role and function of participatory TA than is currently available. In this context the problem of how to deal with uncertainty and inequality is seen as an important motivation for setting up participatory processes, which is closely intertwined within the discussion of democratisation of science and technology.

The analytical framework serves as a background for the description of concrete PTA projects, and for the transversal analysis of the cases. The three dimensions "Social context", "Institutional context", "PTA arrangement" and the inter-relationship between these dimensions, represent the basic structure of the analytical framework. Inside each dimension, a set of aspects are presented, which all together makes up a pluralistic descriptive model.

The research protocol is a practical tool (a check-list) for the empirical analysis of the 16 case studies and for ensuring their compatibility. It treats the many variables that sets the constraints and opportunities of the various actors that are involved in defining and organising the PTA arrangements. The protocol has the same structure as the analytical framework.

The analysis of the project is outlined on five themes, each represented in the report as a thematic paper. In the five papers a transversal analysis of the case studies is made, and models for the understanding of the role, function and workings of participatory TA are presented.

The first paper is entitled *ΑImplementing participatory technology assessment Β from import to national innovation@*. The 16 case studies show a wide range of first-time usage of participatory methods – in a country, at an institution, or in a certain topical area. Such first time use may be based on "import" of a method, on modification of a method in order to shape it to the new application, or on a method developed specifically for the purpose.

The analysis shows that generally PTA methods seems to be transferable between countries and institutions, though the new setting will give the method new connotations.

Main task for all countries is to find out what the role of public participation in policy analysis and technology assessment may be, taking national political culture into account, when trying to open up the traditional expert-oriented analysis by supplementing it with participatory processes. Of course there are still critical voices in regard to the introduction of PTA but acceptance has changed remarkably. Important for the success of PTA is the dedication and willingness of either individuals or institutions to try and believe in this, against whatever odds.

The second paper `*Project Management Β a matter of ethics and robust decision*Α states that good management should follow discourse ethical rules, because the credibility of a debate is closely related to the ethical quality of the debate, and the impact of TA is closely related to its credibility. Difficulties in PTA are often due to managerial problems that arise from poor ethical standards.

Looking at different aspects of PTA management, some conclusions and recommendations are given. Adoption of methods should be done with some humility to the original format. There is a need for more research regarding quality criteria for the outcomes of TA making up an important guideline and evaluation tool for project management in the end. A `PTA cookbookΑ would be helpful describing the qualities of the different methods but also the problems and pitfalls to be aware.

AThe choice of participatory TA methods related to institutional and problem setting@ is the third thematic paper. In the paper it is shown that the choice and the aim of the method are linked to the addressed issue and the institutional motives – the "problem situation".

Depending on the roles played by citizens, stakeholders and experts we distinguish two types of PTA. As a general rule it could be said that expert-stakeholder PTA is appropriate when technical-issues are placed in the forefront. Public-PTA is more appropriate when ethical-moral issues are discussed.

The next paper `*The Role of PTA in the Policy-Making ProcessA* explores the many possible different political roles PTA may play. The range of roles is as wide as from
- evaluating public attitudes towards, and expert opinions of, new technologies, over
- resolving conflicts, to
- carrying out strategic planning.

A large proportion of the cases only had a weak or moderate political role, at least when evaluated from the instant picture given by a case study. The delimited political role of participatory TA is mainly seen as a consequence of the overall consultative function of TA – and not, as might be suspected, as a sign of political irrelevancy of participation. Many factors, however, have an influence on the success on the political performance of a PTA arrangement.

The last paper is describing the *"Impacts of PTA on its societal environmentA.* The issue at stake, the state of public and political debate are important factors for an impact of PTA in the societal and political context. It is relevant whether the procedure is carried out in a political setting with connection to an expressed political will to involve the public/lay-people. The procedure itself can also cause an impact on the media and produce a visibility of the TA-institution.

An important observation is that it is difficult to quantify and to come up with a conclusion on the impact of PTA arrangements, because of the difficulty to define such impact-criteria. On a long term perspective, PTA may have a good chance to change the political climate of debate in a constructive way in the field of technology policy, though on a short term perspective, the impact seems to be little.

The fact that there is a visible growing demand from different persons and institutions to run PTA in a way supports this hypothesis. However more research and long term studies to clarify the role of PTA in democratisation of science and technology are needed. It is not the main task of PTA to have a direct impact on the politician but to help the political decision-makers doing their work.

The *conclusions of the EUROPTA project* can be split into two levels:

A) The issue-specific results and conclusions, connected to certain perspectives, methods, or analytical approaches, which can be found in the analytical framework and the five thematic papers, and which are not repeated in this summary.

B) The results and conclusions of general character about the role, practice and implementation of participatory technology assessment, which are reflecting consensus among the EUROPTA team. Because of the general character, these outcomes do not embrace the considerable diversity of methods and related intellectual, cultural and institutional traditions that the EUROPTA project has met regarding European participatory technology assessment.

The following list of results and conclusions are of the second group only.

1) Participatory TA should not be seen as competing with classical expert TA, but rather as a necessary complementary element thereof. As classical TA has certain limitations regarding social functions and credibility in comparison with participatory TA, generally TA methodology ought to be complemented with participatory measures.

2) Where, in the course of identifying issues for treatment in TA, a need for social learning, critical (public) discourse and/or mediation is found to be a key characteristic of a given issue, the use of participatory methods seems appropriate and should thus be given due consideration.

3) Participatory TA should explicitly be established in order to improve public discourse on, and political opinion forming about, science and technology, with the aim of supporting policy-making with relevant processes and inputs. Participants should not expect to get a decision-making power-base from participatory TA, unless the existing power structure is represented among the participants.

4) As the functional role of participatory technology assessment differs between countries due to variance in national political culture, and – paradoxically – because national politics have to consider the globalisation of science and technology, there is a need for national institutions performing participatory TA.

5) Independently functioning TA institutions should be established within the public domain, with the remit to build up expertise in participation. The institutions should be given permanent status, because of the required expertise and continuity, the time it takes to build up credibility, and the importance of experience with many different methods.

6) Initiators, practitioners and users of participatory TA should develop, communicate and maintain realistic expectations of the impacts of participatory activities. Further they should appreciate the multiple kinds of roles, outcomes and impacts that are characteristic of participation. In general, expectations should be in level with the given conditions of institutional status, experience, resources, and available time.

7) It is advisable to take a rather conservative approach to the modification of methods, unless a thorough analysis or existing experience with the method speak for adjustments. Especially, it is recommended to try to avoid changing the parameters that make up the specific qualities of the method (such as the search for "common ground" in the Future Search Conference, or the consensus element in the Consensus Conference). Despite the

need for caution and experience, the experimentation with, and adaptation of, methods should be encouraged, since there still is a need for new methods and the introduction of participation into new arenas.

8) Development of new participatory tools might sometimes be the most feasible way of introducing participation in TA. If so, it must be recommended to involve experienced practitioners in the design phase.

9) In order to achieve an optimal method selection for the treatment of a given topic in participatory TA, the organiser ought to make use of a comprehensive problem situation analysis and choose the method according to the characteristics of the specific problem situation. It takes a certain insight into the nature of available methods to make such choices competently.

10) Due to the interest in the issue of stakeholder/citizen participation on the part of various organisations, public institutions and individuals working in the broad field of social/public policy, there is a need for developing the communication of the aims, structures, procedures and related "best practice" of existing methods of participatory TA.

11) There is a need for further research concerning:

   a) Quality criteria relating to the outcomes of participatory technology assessment;

   b) The characterisation of the various types of impacts resulting from participation, and the development of impact evaluation tools;

   c) The comparative analysis of the aims, function and impacts of classical *versus* participatory TA.

12) Transnational implementation of participatory TA is recommended in line with the transnational development in science and technology policy. The following actions are suggested:

   a) Pan-European participatory TA. Modified versions of existing methods (for example the consensus conference) could be developed to instigate pan-European citizen and expert panels.

   b) Simultaneous national participatory activities among European Union member states. Existing methods could be used nationally, and the outcome of the national projects could be compared and/or aggregated at European level.

13) There is a need for the development of new participatory methods for the purpose of

   a) Involving decision-makers directly in the participatory process

   b) Involving large groups of social actors

14) The EUROPTA project may best be seen as a starting point for additional support activities, for which a demand has been expressed in various quarters, including:

a) Running dissemination and training seminars that build on the EUROPTA research outcomes;

b) Developing a methodology handbook on participatory TA;

c) Setting up a participatory TA network.