Introduction to citizen participation in science and technology

Procida Training Workshop
Alain Kaufmann
University of Lausanne
The context

• Drawbacks of the “Public Understanding of Science” or “deficit model” are widely acknowledged
• “Deliberative or participatory turn”
  – Democratic deficit in S & T
  – Environmental crisis and other controversies; learning from the GMO controversy
  – Questioning experts and decision makers in risk assessment and management
  – Activists or concerned groups (“scientific citizenship”)
• Technology Assessment (TA, pTA, CTA, RTTA,…) as a way out
Varieties of public engagement

- Rowe and Frewer (2000; 2005): about 100 mechanisms
- Public communication, PUS or public instruction model (Callon): TV broadcast, hotline, conferences, etc.
- Public consultation: referenda, surveys, focus groups, etc.
- Public participation, public debate model (Callon): citizens’ juries, citizens’ and consensus conferences, planning cells, etc.
A definition

“Public participation” encompasses a group of procedures designed to consult, involve, and inform the public to allow those affected by a decision to have an *input* into that decision.
Benefits expected from public participation in science and technology

• **Quality of knowledge (epistemic argument):** lay people and stakeholders can contribute to knowledge production and identify solutions which can improve the innovation process; limited rationality; e.g. *lay epidemiology*

• **Democratic deficit (normative argument):** participation improves democracy and enhances citizenship; *justice, empowerment*

• **Political legitimacy (instrumental argument):** participation allows a more inclusive governance in a context characterised by a growing complexity and by a loss of public interest in politics; re-inforces legitimacy
« Currently, here is what we know about GMOs…
Thus there is no *rational* reason to be frightened! »
2. Potential drawbacks
« Eight rungs on the ladder of citizen participation »

A Ladder of Citizen Participation - Sherry R Arnstein
Some « hot issues » concerning participation

• What is the political legitimacy of PP ?
• How are PP connected to political decision ?
• Which impact for PP on the public sphere, science and technology policy, and innovation processes ?
• Which method to choose, for which objective and in which context ?
3. A short glance at pTA experiences
- Testing our Genes (2002)
- Roadpricing (2001)
- Electronic Surveillance (2000)
- Noise and Technology (2000)
- Genetically modified Food (1999)
- Teleworking (1997)
- The Consumption and Environment of the future (1996)
- The Future of Fishing (1996)
- Where is the Limit? – chemical substances in food and the environment (1995)
- Information Technology in Transportation (1994)
- A Light-green Agricultural Sector (1994)
- Electronic Identity Cards (1994)
- Infertility (1993)
- The Future of Private Automobiles (1993)
- Technological Animals (1992)
- Educational Technology (1991)
- Air Pollution (1990)
- Food Irradiation (1989)
- The Citizen and dangerous Production (1988)
List of consensus conferences organised elsewhere:

- **ARGENTINA** Genetically modified foods (2000); human genome project (2001).
- **AUSTRALIA** Gene technology in the food chain (1999)
- **AUSTRIA** Ozone in the upper atmosphere (1997)
- **CANADA** Food biotechnology (Western Canada, 1999); municipal waste management (Hamilton City/Region, 2000)
- **GERMANY** Citizens' Conference on Genetic Testing, (2001 Deutsches Hygiene-Museum)
- **ITALY** Consensus Conference on GMO’s
- **ISRAEL** Future of transportation (2000)
- **JAPAN** Gene therapy (1998); high information society (1999); genetically modified food (2000)
- **NETHERLANDS** Genetically modified animals (1993); human genetics research (1995)
- **NEW ZEALANDS** Plant biotechnology (1996); plant biotechnology 2 (May 1999); biotechnological pest control (Sept. 1999)
- **NORWAY** Genetically modified foods (1996); smart-house technology for nursing homes (2000)
- **SOUTH KOREA** Safety & ethics of genetically modified foods (1998); cloning(Sept. 1999)
- **SWITZERLAND** National electricity policy (1998--conducted in 3 languages with simultaneous translation); genetic engineering and food (June 1999); transplantation medicine (Nov. 2000)
- **U.K.** Genetically modified foods (1994); radioactive waste management (May 1999)
• Tool box for civil society participation
  – Advisory committees
  – Citizen’s advisory councils
  – Citizen’s jury (including planning cells, etc.)
  – Consensus conference
  – Focus groups
  – Future Workshops
  – Mediation
  – Negotiated rule making
  – Planning for real
  – Public hearings
  – Public survey
  – Referendum
  – Scenario Workshops
  – …

(Ifok, For the European Conference on Civil Society Participation, June 2003)
4. Metaplan presentation

Metaplan exercise:
- Articulation of individual analysis and group discussion
- Collective elaboration (framing) of an issue

The question you are going to work on:

“What do I want to learn about citizen participation in science and technology?”