"Roadmapping Science in Society Impact, Evaluation and Accountability"
30 June - 1 July 2009, Paris (FR)

"Science in Society: a European Perspective"

European Commission

Research DG

RTD-L3 "Governance and Ethics"

Philippe Galiay

**"Roadmapping Science in Society
Impact, Evaluation and Accountability"
30 June - 1 July 2009, Paris (FR)**

"Science in Society: a European Perspective"

1. Science, Society and Citizens in Europe

2. Evolution: tensions, priorities, instruments

3. Lessons

4. Future

5. Roadmapping Science in Society

2000: Lisbon Summit (Knowledge Based Society)

2001: Governance White Paper

2001: **Science and Society** Action plan

2002: RTD Framework Program VI (**80** / 17.500 M€)

2007: RTD Framework Programme VII (**330** / 54.000 M€)

"Science in Society: a European Perspective"

1. Science, Society and Citizens in Europe

2. Evolution: tensions, priorities, instruments

3. Lessons

4. Future

5. Roadmapping Science in Society

Vancouver (CA)

Evolving S&S tensions

- **Safety**: Food (dioxin,…), Medical (growth hormones, contaminated blood, fertility,…),
- **Environment** (climate, energy, biodiversity, ozone,…),
- **Economy** (Finance, fisheries, agro industry,…),
- **Fundamental rights** (life appropriation, identity thefts, privacy, insurances,…),
- **Ethics** (future generations, eugenics, enhancement, doping, reproduction, animals,…),
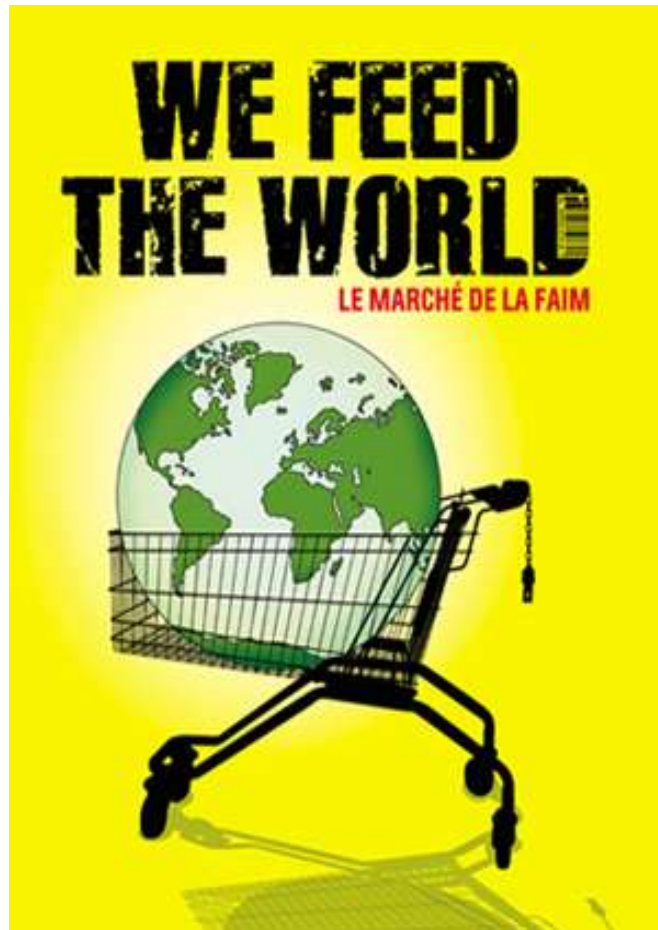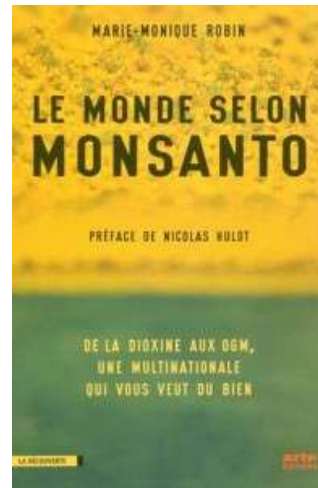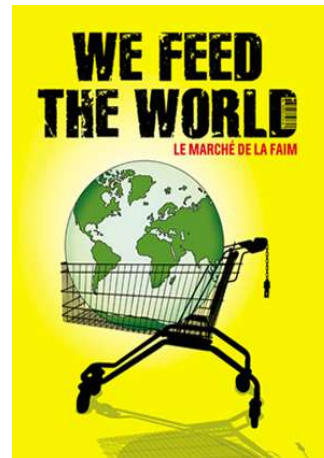- etc…

EUROPEAN COMMISSION
Community research

"Roadmapping Science in Society
Impact, Evaluation and Accountability"
30 June - 1 July 2009, Paris (FR)

"Science in Society: a European Perspective"

WE FEED THE WORLD
LE MARCHÉ DE LA FAIM

"What rising protests…

"842 million people are suffering from aggravated chronic malnutrition. Nevertheless, present agriculture produces enough food to feed 12 billion people. Said otherwise, any child dying today is, in fact, murdered."

Jean Ziegler, sociologist and Swiss policy maker, rapporteur spécial de la Commission des Droits de l'homme de l'ONU pour le droit à l'alimentation

Erwin Wagenhofer (AT), 2005

CAPACITIES

…do tell us? »

Is "progress machine" jamming?

Is a techno-future attractive for next generations?

"Knowledge society": what kind of governance?

Science, Society and Citizens in Europe

1. New relationship between science and society

2. Bringing research closer to society

3. Using scientific and technological progress responsibly

4. Stepping up the science/society dialogue

5. Science and the public in the European Research Area

Science and Society Action Plan

1 - Promoting scientific education and culture in Europe

2 - A science policy closer to the citizen

3 - Responsible science at the heart policy making

FP VI Structuring the European Research Area

1 - Bringing research closer to society [governance, scientific advice]

2 - Responsible research and application of science and technology [ethics, risk and uncertainties]

3 - Stepping up the science/society dialogue and women in science [public understanding and confidence, young people, women]

FP VII Capacities

1 - A more dynamic governance of the science and society relationship [advice, trust, access, broader engagement, better understanding, universities]

2 - Strengthening potential, broadening horizons [gender and research, young people and science]

3 - Science and society communicate [media, science events, audio-visual, prizes, mutual understanding]

Evolution of Governance instruments
2002 to 2009

– Studies, Coordination and Support Actions (2002+)

– Ethical Review (2002)

– Co-operative Research Processes (2005)

– Research for the Benefit of CSOs (2007)

– Pairing Schemes (2007)

– Code of Conduct for 'Nano' Research (2008)

– Public Engagement in Research Plans (2009)

"Science in Society: a European Perspective"

1. Science, Society and Citizens in Europe

2. Evolution: tensions, priorities, instruments

3. Lessons

4. Future

5. Roadmapping Science in Society

"Science in Society: a European Perspective"

Citizen Participation in Science and Technologies (CIPAST)

April 2005 – March 2008

« …after Dresden and Naples we now have an embryo of a network of CIPAST correspondents. This existing network should be enlarged to foster the emergence of a European culture of participatory democracy in scientific and technological issues. Norbert Steinhaus »

CIPAST website: www.cipast.org/

EUROPEAN COMMISSION
Community research

CAPACITIES

DAMS

Electric power
Water regulation
Irrigation
Reservoirs
Leisure

…

Source: RISKBRIDGE project
(http://www.riskbridge.eu/)

Iguazú (ARG)

DAMS

A very simple physical principle

Stop the water flowing!

Itaipú dam (BR-PY)

DAMAGES !

Biology,
Ecology,
Geology,
Climatology,
Sociology, etc.

"… the 'business
as usual' scenario is neither a
feasible nor a
desirable option."

The Report of the World Commission on Dams
November 2000
(http://www.dams.org/)

Teton Dam (US) fails

Lessons from governance case studies:

- Lack of **inclusiveness** in framing issues

- Partial in **scientific advice**

- Insufficient in **risk assessment**

- Insufficient in **communication** and **dialogue**

- Lack of sense of **urgency**?

"Roadmapping Science in Society Impact, Evaluation and Accountability"
30 June - 1 July 2009, Paris (FR)

"Science in Society: a European Perspective"

1. Science, Society and Citizens in Europe

2. Evolution: tensions, priorities, instruments

3. Lessons

4. Future

5. Roadmapping Science in Society

S&S Stakeholders: European Networks

– Parliamentary Offices (EPTA,…)
– Science Academies (ALLEA, EASAC, IAP,…)
– Research Organisations (ESF,…)
– Researchers (EAST, STS,…)
– Universities (UNICA, EUA, Living Knowledge,…)
– Museum and Science Centres (ECSITE,…)
– Civil Society (ECAS, EFC,…)
– Cities and regions (EUROCITIES, SARLORLUX,…)
– + Business, Member States, Media, Education,…

Evolution of Governance instruments
2010

– Studies, Coordination and Support Actions (2002+)

– Ethical Review (2002)

– Co-operative Research Processes (2005)

– Research for the Benefit of CSOs (2007)

– Pairing Schemes (2007)

– Code of Conduct for 'Nano' Research (2008)

– Public Engagement in Research Plans (2009)
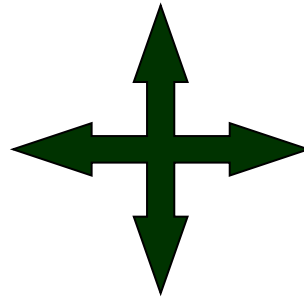
– Mutual Learning and Mobilisation ?

Four cardinal SiS directions

Operational
Building and operating tools

Cultural
Changing attitudes

Legal
Securing rights, defining obligations

Cognitive
Gathering, creating and spreading knowledge

Four governance levels

- Global   (UN, WTO, WHO,…)

- Multinational   (EU,…)

- National   (MS, third countries,…)

- Local/Regional

"Science in Society: a European Perspective"

1. Science, Society and Citizens in Europe

2. Evolution: tensions, priorities, instruments

3. Lessons

4. Future

5. Roadmapping Science in Society

Science in Society, a dialogue or a renewed relationship where each partner should:

– have a better knowledge of each other,

– show mutual respect,

– behave,

– exchange,

– do things together,

– look forward in the same direction,…

BENEFITS and WEAKNESSES of a dialogue approach

+ Do we have a choice? (see list of issues!)

- Difficulties rather than weaknesses: inertia ("business as usual" syndrome, lack of imagination ("think out of the box")

IMPACTS should be as SMART as the objectives

- **S**pecific: What do WE want to achieve?

- **M**easurable: Are WE able to measure it?

- **A**chievable: Do WE clearly consider it attainable?

- **R**ealistic: Do WE have the will and resources?

- **T**ime: Do WE agree on a time scale?

EVALUATION: Who will qualify the measure?

- Should it be independent?

- Who will assess what is good or bad, enough or not enough? And how?

- Should that be done in partnership?

ACCOUNTABILITY: Do we agree on the meaning?

- **Responsibility**: YOU are in charge!

- **Accountability**: YOU have to give account of/explain your actions to somebody

- **Liability**: YOU are legally responsible for something, and you can be punished if it breaks the law

Thank you for your attention!

References

FP7:   http://cordis.europa.eu/fp7/home_en.html
FP7 Calls: http://cordis.europa.eu/fp7/dc/index.cfm

Science in Society:
http://ec.europa.eu/research/science-society/