Looking back on looking ahead: Impacts and effectiveness of using and communicating scenarios

METIER Training Course
21th April 2009
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Strategic Futures Group
The main tasks of the Strategic Futures Group of the EEA are:

- to build the forward-looking components of Europe’s Shared Environment Information System (SEIS Forward)
- To develop and support forward-looking assessments, as own-standing analysis and as part of EEA’s and international reporting activities such as SOER, UNEP-GEO, MEA
- To support member countries with capacity-building activities

**BLOSSOM**
- Literature review, country studies and good practice comparisons how European countries embed a long-term perspective into their decision-making
- **forthcoming**

**PRELUDE**
- 5 scenarios for land use change in Europe until 2035
- Participatory scenario analysis in a visual, interactive presentation format (2005)
- http://www.eea.europa.eu/ Prelude

**European Environment Outlook**

**2010 SOER part A**
- Explorative assessment of long-term global trends that will shape the strategic context for Europe’s environmental policy and long-term policy implications
- **Forthcoming**

**SEIS FORWARD**
- Catalogue of outlook indicators
- Catalogue of scenario studies
- Analysis and Inventory of available environmental simulation models
- All reports available at http://www.eea.europa.eu/themes/scenarios

**GLIMPSES**
- Outlook analysis of key driving forces and uncertainties of long/term pan-European environmental futures (2007)

**Environmental trends & perspectives in Western Balkan: Towards Sustainable Consumption**
- Analysis of key trends and driving forces
- Technical report (forthcoming)

**European Transport Futures**
- Scenarios for emerging system innovations and their implementation conditions

**Environment & Security: Energy and Environment**
- Assessment of existing strategies in Belarus, Ukraine and Moldova (ongoing)
  - With UNEP, UNDP, OSCE
Patterns of communication between policy-makers and scientists

"Give me a one-armed economist!"

US-President Harry Truman

"Speaking truth to power"

Aaron Wildavsky

We are all wrong...
“... while Napoleon thought he was in control of events, the Russian general Kutuzov knew that neither of them were, and so he made fewer mistakes...”

Tolstoi *War and Peace*

Scenarios help to reduce our over-confidence into the future
Developing scenarios

Between “common wisdom”…:

• Dynamic representation; no forecasts
• Series of common basic steps

Scenario exercises do not end after developing and analyzing a set of scenarios; their use and active communication is as important as the scenario development process and needs to be planned well ahead.
How to use scenarios

- Scenario assessments are most effective when perceived to combine three characteristics:
  
  - **Saliency** to potential users (relevance)
  - **Credibility** with regard to using scientific methods (soundness)
  - **Legitimacy** in the way the exercise is designed/conducted (inclusiveness, non-bias)

- The importance of each of the characteristics, however, varies with the intended purpose and use.

Important dimensions:

- The respective context
- Appropriateness of process
- Suitability of type and format
- Match between type of context and communication
- Fit of scale

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**Using scenarios is context-dependent**

Even the most compelling, well-crafted scenarios can live a life on the shelf if you have the wrong question, type, format etc.
Your methodological approach determines much of what you can do afterwards

**Formalised methods**
- elicit information in a systemic way...
- ...but leave little room for stakeholders

**Non-formalised methods**
- increase buy-in and stimulate creativity and ownership, but...
- ...produce the risk of producing irrelevant or inconsistent information if not well-facilitated

The non-formality of methods often increases with the degree of stakeholder involvement
Prepare carefully

Determine your purpose

Map purpose to context

Map target audience and context conditions
- Few or many actors
- Loose or stable relationships
- Information needs
- Information habits

Develop communication strategy
- Clear success criteria
- Ensure backing

Present scenarios
- discuss implications
- discuss response options and lessons learnt

Monitor and evaluate outreach action
Using scenarios for scientific exploration

- Provide input into other assessments – most dominant use
- Provide a frame for aligning different research strands and scientific disciplines - learning space

- stakeholder involvement is rather consultative
- need for credibility – more formalized process
Using scenarios for scientific exploration

**Appropriateness**
Credibility = standards of good science practice?

**Suitability**
- Transparency = congruence across the assessment?

**Communication**
- key target group is other scientists

**Fit of scale**
- not too important
How to use scenarios for informing, framing and educating public debate

- Informational function
- Educational function
- Facilitate exchange of conflicting societal views
  - vision building
  - discuss action needs
  - Explorative vs. Normative
  - Stakeholder involvement can range from consultation to co-design (more frequently)
  - need for relevance – formalisation less important
Introducing the five PRELUDE scenarios

- **GREAT ESCAPE**
  - Europe of Contrast

- **Evolved Society**
  - Europe of Harmony

- **Clustered Networks**
  - Europe of Structure

- **Lettuce Surprise U**
  - Europe of Innovation

- **Big Crisis**
  - Europe of Cohesion
The PRELUDE 2action outreach process

Took place from summer 2005 – winter 2007

High-level events:
• Informal meeting of agriculture and environmental ministers in London
• Official launch together with Friends of Europe in Brussels
• Special session at GREEN WEEK 2007

Targeted EEA workshops:
• PRELUDE 2action workshop in Copenhagen
• PRELUDE in Austria

Targeted policy information and support
• DG RTD
• DG AGRI
• Land Use Policy Group / German Presidency conference
• Different societal stakeholder events / meetings / conferences
A snapshot from the future

GREAT ESCAPE
Europe of Contrast

“As a girl, I worked with my parents on our small farm in Poland. We were poor, so when we sold the farm we were hoping for a better life in the city. However, it was difficult to find a good job there. So I left and took this gardening job in Parkville. I make just enough money to get by. How am I going to be able to pay for my son’s surgery?”

Maria, 45 years old, Polish, gardener, unmarried, 1 child. Year 2030
A snapshot from the future

"The heavy floods & volatile energy prices made many of us think ‘enough is enough’. We came to believe that a different lifestyle was needed. We packed our things and moved to Northern Italy to start a new and more self-sufficient life. I am still happy that we came."

Sander, 62 years old, Dutch, retiree and hobby farmer, married, 1 child, 1 grandson. Year 2030
PRELUDE in Austria 2007

What do these scenarios mean for Europe, and Austria?

2-day workshop with around 40 representatives from across government and agencies

Facilitated tour through the scenarios with comparative lesson drawing
Mont Fleur scenarios / South Africa

From Febr. 1990 to April 1994

A forum to stimulate debate how to shape the next 10 years

22 stakeholders, informal open debate

14-page report, 30 minutes video

Outcome: common vocabulary, mutual understanding

Participants focused on their commons - the broad future of South Africa – find and enlarge common ground -> gentle art of reperceiving
How to use scenarios for informing, framing and educating public debate

Appropriateness
• appealing storylines & a clear and easy to understand question

Suitability
• contrast helps

Communication
• multi-media or visualisation

Fit of scale
• more relevant for the informational function
# How to use scenarios for decision-making support

<table>
<thead>
<tr>
<th>Indirect</th>
<th>Direct</th>
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<tr>
<td>Stimulating wider debate about possible futures</td>
<td>Clarifying an issue’s importance and framing a decision-making agenda</td>
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<td>Getting stakeholder buy-in or engagement</td>
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... across the policy cycle
How to use scenarios for decision-making support

Sensitivity / risk assessment
• uses a specific decision, where the need for decision-making is known
• series of descriptive steps -> "go"/ "no-go"
• clear decision focus needed – easier to implement in the corporate world

Strategy evaluation
• similar, but for a whole strategy/policy package
How to use scenarios for decision-making support

**Strategy planning (with a planning focus)**
- select one of your scenarios as the planning focus scenario
- develop a strategy that performs well in this scenario
- test robustness in other scenarios
- very conventional, with limitations

**Strategy planning (without a planning focus)**
- identify maximum number of feasible options across all scenarios
- compare across scenarios to find the one which is most robust, i.e.
  Perform reasonably well in any of the scenarios, and works best in comparison to all other options being considered (qualifiers...)

**Are we being effective?**
7 standards of utilising knowledge from Knott & Wildavsky (1980)

1. Reception
2. Cognition
3. Reference
4. Effort
5. Adoption
6. Implementation
7. Impact

Why NOT?

oftentimes met

not routinely attained
Review of evaluative scenario literature with RAND

Literature review: 54 journal or book chapters match our criteria of "evaluative scenario literature"
Review of evaluative scenario literature

- Dominant mode is support to scientific exploration, with special emphasis on further modelling and analysis. Framing of public debates occurs less often.
- Little to less is documented regarding impacts on policy making. Many decision-making processes that could benefit from scenarios do not seem to really use them; conversely many scenario studies treat the policy dimension in a superficial way.
- Activities seem to be geared towards better understanding and awareness raising; few examples of “strategic wind-tunnelling” documented. Mostly, benefits relate to individual learning, not organizational performance improvement.
**Bridging scenario and strategy analysis**

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Source: adapted from van der Heijden (2004), Barre (2007)
### Bridging scenario and strategy analysis

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"This plot is highly unlikely given the state of that foreign country’s aviation programme”

US Federal Aviation Administration quote in 1998
Response to Central Intelligence information that a group of unidentified arabs planned to fly an explosive-laden airplane into the World Trade Center
## Bridging scenario and strategy analysis

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**Workshop participants survey**

**How important are the following objectives when using scenarios or other futures methods?**

- Getting stakeholder engagement or buy-in
- Triggering cultural change within the organisation
- Appraising robustness of options for future action
- Generating options for future action
- Clarifying an issue’s importance and framing a decision-making agenda
- Stimulating wider debate about possible futures

**Mean**

- Mean
- + Standard deviation

**Not important at all** | **Very important**

0 | 1 | 2 | 3 | 4 | 5
Workshop participants survey

How successful is scenario thinking in achieving these objectives?

- Getting stakeholder engagement or buy-in
- Triggering cultural change within the organisation
- Appraising robustness of options for future action
- Generating options for future action
- Clarifying an issue’s importance and framing a decision-making agenda
- Stimulating wider debate about possible futures

Not successful at all  Very successful

Mean  +/- Standard deviation

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Workshop participants survey

What are the key factors that contribute to achieve the objectives of scenarios and other futures methodologies?

- Political factors (e.g., the organisation’s willingness to take a long-term view)
- The institutional context of the user/audience
- The resources available for the project
- The level of involvement of the user/audience with the scenario exercise
- The skills/experience of those using the scenario outputs
- The skills/experience of those carrying out the scenario exercise
- The flexibility of the methodology to the specific context
- The rigor/robustness of the application of the methodology
- The selection of the right methodology for the set goals
- The selection of appropriate and attainable goals for the exercise

Mean +/- Standard deviation

Not important at all       Very important
How to use scenarios for decision-making support

**Appropriateness**
- right stakeholders
- right question

**Suitability**
- interplay of format and

**Communication**
- depending on level of hierarchy

**Fit of scale**
- relevant
Barriers

Scenarios will often raise more questions than answers
Predic-then-act conforms to path-dependency in policy-making

Particular challenges

- Heterogenous nature of objectives and interests faced by governmental agencies
- Weak institutionalisation, silo mentality and unclear benefits
- Different time horizons, but also different attention foci of policy-makers and analysts
- Contradictions between process and product functions
- Contradictions between deliberative and representative democracy
Some options to consider

- Virtual network or physical location?
- Interdep. steering groups or not?
- In-built or outsourced expertise?
- Formalised inputs or space for discussion?
- Temporary or permanent?
- Expert-led or stakeholder-driven?
- Centralised or decentralised?
- Government funded or contribution based?
- Issue-based network or think tank with own agenda?