

Supporting stakeholder and public participation aspects of multidisciplinary collaborative processes

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Problems to solve

- Multidisciplinary collaborative processes: teams with different disciplinary backgrounds have to cooperate, including:
 - Decision maker / competent authorities
 - Experts / professionals (e.g. modelers)
 - Stakeholders
 - Public
- Problems:
 - Miscommunication
 - Lack of (mutual) understanding
 - Malpractice



Stakeholder / public participation

- Defined by Henriksen et al., submitted):
Allowing people to influence the outcome of plans or decisions
- Levels of stakeholder involvement:
 - Being informed
 - Being consulted
 - Active involvement

Why stakeholder and public participation?

- According to Enserink and Monnikhof (2003):
 - Improve quality and effectiveness of policy proposals and decisions
 - More support for policy proposals and decisions
 - Enhanced involvement of specific social groups in democracy
- Moreover, often enforced by legislation, e.g. Water Framework Directive (WFD, Article 14, EU) states:

“Member States shall encourage the active involvement of all interested parties in the implementation of this Directive, in particular in the production, review and updating of the river basin management plans.”

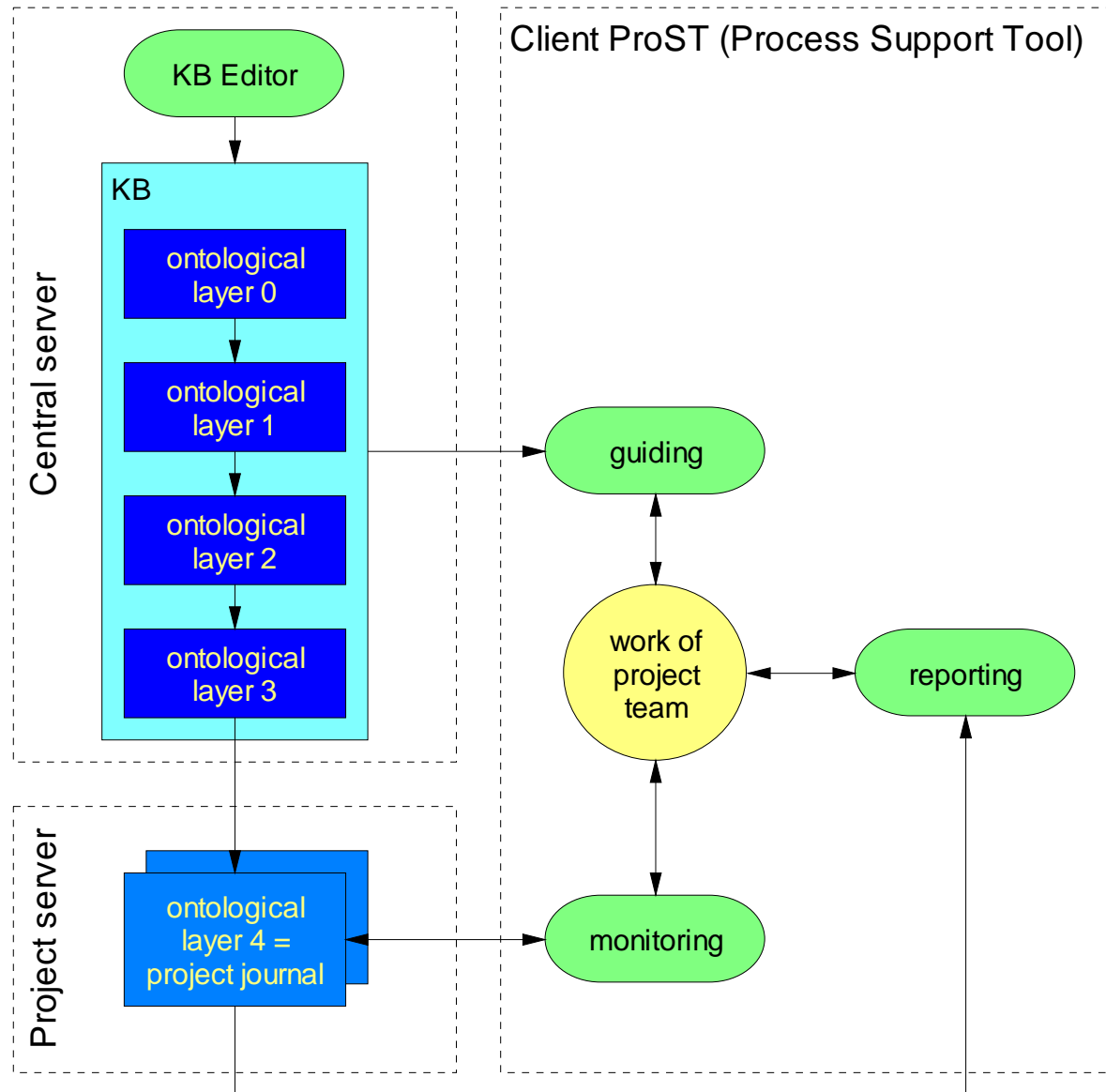
Brief history of support for collaborative processes

- 1994-2001: Good Modelling Practice → Handbook GMP
Scholten, 1994, Scholten and Udink ten Cate (1999),
Van Waveren *et al.* (1999), Scholten *et al.* (2001)
- 2002-2005: HarmoniQuA → MoST + modelling KB
Refsgaard & Henriksen (2004), Olsson *et al.* (2004),
Refsgaard *et al.* (2005), Scholten *et al.* (2006), Scholten *et al.*
(2007)
- 2005-now: AquaStress / Harmoni-CA → ProST + KB-
editor
Scholten and Kassahun (2006), Henriksen *et al.* (submitted)

Collaborative support technology

- Collaborative support framework consisting of:
 - Ontological Knowledge Base (KB with process definition → guidance)
 - KB-editor (to define processes, glossaries, etc.)
 - ProST – ProSt – ProSupport Tool
 - Set up project
 - Guidance from KB
 - Monitor team doings and store in project journal
 - Project reporting
 - Server application (synchronization of project journals, etc.)

Architecture collaborative technology



Some applications

- Projects in which MoST or ProST is used or can be used
 - HarmoniQuA
 - AquaStress
 - WFD
 - other

HarmoniQuA

- EU-financed project 2002-2005
- 12 partners 10 EU countries
- Aiming at Quality Assurance for model-based water management
- Products: modelling-KB + MoST + case studies + help + training
- Modelling-KB consists of process definition:
 - Decomposition of modelling process into *steps*, steps into *tasks*, tasks into *activities*; tasks and activities can have methods/tools
 - Steps, tasks, activities, methods have
 - Definition
 - Explanation
 - Sensitivities and pitfalls
 - (examples)
 - Modelling KB provides guidance to MoST

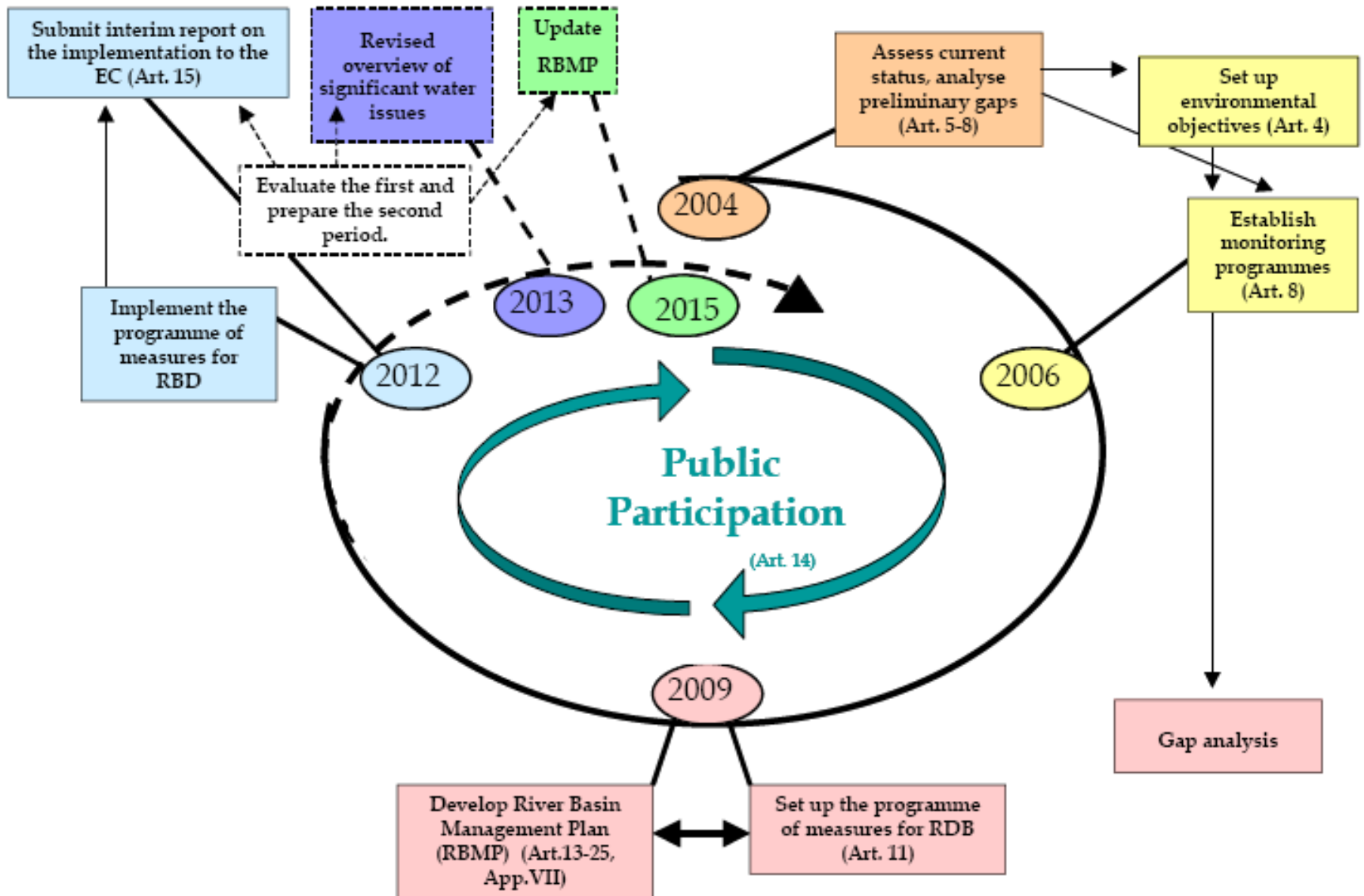
HarmoniQuA (continued)

- MoST (Modelling Support Tool)
 - Set up modelling projects (team, subprojects, domains, fine-tuning process, authorizations);
 - Modelling guidance (filtered for user roles, domains from modelling KB)
 - Monitoring what team members do and storage in model journal →
 - More transparency (auditing)
 - Easier communication within team
 - Better communication between client, modelers and stakeholders/public
 - Reporting of model projects from model journal
- MoST used in:
 - 21 case studies
 - Education (university)
 - Other projects (NL, DK, UK)
- Stakeholder / public participation in model-based water management:
 - In review task at the end of each step
 - Levels: information and consultation

AquaStress

- EU-financed project 2005-2009
- > 35 partners
- Aiming at mitigation of water stress (i.e. a limited availability of water resources of decreasing quality) by providing interdisciplinary methodologies in planning of problem solving
- ProST technology applied to define water stress mitigation in:
 - Velt and Vecht basin (Netherlands))
 - Iskar basin (Bulgaria)
- ProST is based on MoST but:
 - With different KBs (1 Velt and Vecht and 1 Iskar)
 - More planning of projects and more project management
- Stakeholder / public participation in model-based water management:
 - In many tasks, including review tasks
 - Levels: information and consultation

Opportunity: WFD planning and support



Other opportunities

- Interest from Newater (EU-financed project; New Approaches to Adaptive Water Management under Uncertainty, <http://www.newater.info/>)
- Interest from Spicosa (EU-financed project; Science and Policy Integration for Coastal System Assessment, <http://www.spicosa.eu/>)
- Modelling projects in:
 - Denmark
 - UK
 - Netherlands

Challenges and conclusions

■ Challenges

- More flexibility to adapt process definition while executing a project
 - Not needed for modelling (a rather well known type of process)
 - Needed for AquaStress, planning, long-term processes (WFD)

■ Executing tasks parallel

- Supported by Petri-Net approaches in workflow management
- In MoST and ProST: parallel activities, not tasks, but not a big problem

■ Conclusion: MoST-ProST technology is:

- promising
- reusable

Questions?

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Public Participation levels and relevant methods

From E. Mostert / Water Policy 5 (2003) 179–197.

■ Level 1: Information

The public gets/has access to information
(not genuine PP, but the basis for all forms of it)

■ PP method:

1. Leaflets and brochures
2. Mailings
3. Use of the media: press releases, press conferences
4. Information centres
5. Repositories (other than 4, e.g. libraries and city halls)
6. (Travelling) exhibitions
7. Information hotlines/ contact persons
8. Open house
9. Field trips
10. Briefings (at meetings of residents' associations, women's clubs, etc.)
11. Internet
12. Cultural events (e.g. street theatre, especially for raising awareness)

Public Participation levels and relevant methods

From E. Mostert / Water Policy 5 (2003) 179–197.

■ Level 2: Consultation

The views of the public are sought

■ PP method:

13. Reply forms
14. Opportunity to comment in writing
15. Public hearings and meetings
16. Interviews
17. Opinion polls
18. “Stakeholder analysis”
19. Gaming
20. Internet discussions
21. Advisory commissions/boards, focus groups
22. Non-binding referenda

Methods 4, 6, 7, 8, 9 and 10 could be used for consultation too.

Public Participation levels and relevant methods

From E. Mostert / Water Policy 5 (2003) 179–197.

■ Level 3: Discussion

Real interaction takes place between the public and government

■ PP method:

23. Small group meetings (“workshops”, “charrettes”, “coffee meetings”, “round tables”, “study circles”, “brainstorm sessions”, “planning cells”, “citizen juries”, etc.)
24. Large group meetings involving splitting up into smaller groups and/ or rotation between front benches and back benches or between subgroups (e.g. working groups, “Samoan circle”, “open space meetings”, carousel)

Methods 8, 9, 10, 19 and 21 can be used too.

Public Participation levels and relevant methods

From E. Mostert / Water Policy 5 (2003) 179–197.

- **Level 4: Co-designing**

The public takes an active part in developing policy or designing projects

- **PP method:**

Several of the meeting formats mentioned under 23 and 24.

Public Participation levels and relevant methods

From E. Mostert / Water Policy 5 (2003) 179–197.

- **Level 5: Co-decision-making**

The public shares decision-making powers

- **PP method:**

25. Negotiations, e.g. resulting in a “voluntary agreement”

26. Public representation in governing bodies with government

27. Corrective referenda and all binding referenda initiated by government

Some of the meeting formats mentioned under 23 and 24 may also be used

Public Participation levels and relevant methods

From E. Mostert / Water Policy 5 (2003) 179–197.

- **Level 6: Decision-making**

The public performs public tasks independently functions

- **PP method:**

28. Water users' associations and other NGOs performing public

29. Popular initiatives

Some of the meeting formats mentioned under 23 and 24.