Federated eParticipation Systems on Environmental Issues and its role in Industrial Ecology

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Introduction

Engaging stakeholders in policy-making is a sound investment and a core element of good governance, since it allows governments to tap wider sources of information, find new perspectives and potential solutions, and improve the quality of the decisions reached. However, for interactive, collaborative decision-making between industry, citizens and politicians, two key elements are overall required:

- Businessmen and citizens must be prepared to become knowledgeable about current issues and to express opinions (particularly on new initiatives) in order to bring clarity to the decision-making processes of elected representatives.
- The government must be prepared to provide timely, comprehensive information, as well as channels of communication through which businessmen and citizens can express their opinions and engage in debate.

It is needed going beyond the currently available content management information and communication technologies of parliaments’ and administrations’ web sites supporting eDemocracy such as:
- websites,
- e-mail,
- FAQ lists,
- web-based discussion boards,
- ...

The main objective of FEED is to apply a new concept in eParticipation by allowing stakeholders to have seamless access to existing federated content that matches their needs for information supporting the several aspects of a public deliberation, when focusing Environmental and Energy issues.

FEED constitutes a Stakeholders-Driven trial project, that provides the corresponding tools and engages a critical mass of public involvement in the initial stages of the legislative process. Specifically FEED focuses at:

- Empowering the legislation proposal formation stage,
- Support the debate at state and municipal administration level but with a truly Pan-European orientation,
- Target the legislative and policy issues of Environment and Energy,
- Test in practice novel approaches for user involvement.
FEED project

The FEED European Added Value is explicit, at an institutional, communicative and technological level, and spins around the following axes:

- Producing better quality policy with content federation capabilities.
- Building trust and gaining acceptance of policy by giving NGOs, citizens and businesses the means to supervise government and policy implementation and balancing the power of lobby organizations as far as energy and environmental issues are concerned.
- All stakeholders have the same chance to participate in the public exchange of information (nobody can be excluded).
- The choice of topics is open for everybody and the discussion can be interrupted and picked up at a later point in time.
- The debate is free of outside pressure or any other influences and allows the interaction with all.

FEED partners consortium

FEED is project solved by partners consortium consists of:

- National Technical University of Athens (NTUA), Greece;
- Zenc BV, Netherlands;
- Public-i Group Limited, UK;
- Athens Technology Center SA (ATC), Greece;
- Masaryk University, Czech Republic;
- University of the Aegean (AEGEAN), Greece.
Stakeholders Engagement Processes
(Practice of the Czech Republic)

- In the FEED case, a questionnaire was formulated and sent to the pilot users to gather an overview of the existing situation in terms and views of:
  - Stakeholders,
  - Deliberation process,
  - Main Issues addressed,
  - Cross-border nature of the user case.
- FEED partners aimed the questionnaire for investigation of the environments where the FEED platform should be deployed.
- The questionnaire consisted of two sections of questions, aiming at extracting useful data for requirements definition. The use of questionnaire should ensure the consistency of identified requirements throughout all subjects from all participating countries.

Questionary: Questionary: Issues Addressed and Cross Border Nature of Issues

Stakeholders described the pilot shortly in more detail:

- **Q: What is the main issue?**
  - Aim: Identifying the main energy or environmental issue that the pilot user faces.
- **Q: Why is it a problem?**
  - Aim: To identify the reasons that makes this issue a problem that needs the creation of a legislative framework to be supported by a deliberation process.
- **Q: Why is participation important?**
  - Aim: To explore and explain the reasons that make participation of citizens, organizations, and public authority important in the debate and deliberation process. To elaborate on the reasons for the problem owner to engage more decision makers and other authorities. To explain why the decision requires support from the public, pressure groups, businesses and investors in a more balanced way.
- **Q: What type of evaluation of the pilot do you envision?**
  - Aim: Define the criteria and metrics for the evaluation of the pilot implementation. The Pilot surrounding the issue will be supported by eParticipation technology. It serves to envision the impact of that technology on the actors at this stage already:
    - Who are the actors
    - Who measures the success of the outcome
    - Is success measured in content or process
    - What is the role of the media in this case
Questionary: Issues Addressed and Cross Border Nature of Issues

- Q: What is cross-border about the pilot?
  - Aim: To define the cross-border nature of the pilot scenario. Why is it an issue that is relevant for more than the problem owners and actors in the specific case. Who are the interacting

- Q: What could be made general out of the evaluation?
  - Aim: To stress the importance and relevance for other public bodies of the FEED platform tools in the whole pilot debate and deliberation process at hand in order to help to the formatting of a legislation framework supporting all the aspects of the issue addressed.

- Q: What is state of the art deliberation about the pilot?
  - Aim: To describe the innovative ways that the FEED platform is going to support the deliberation process compared to current state of affairs and enhance the democratic character and representative democracy, referring to the pilot execution.

Questionary: Stakeholders and Deliberation Process

- Issue: Political context of deliberation
  - Aim: Identify the entities stakeholders involved in the several deliberation stages and their type of participation in the process. Each country has different names for the players and the political arena involved. The interaction is often complex and not black-and-white. On line deliberation processes should support the relevant nuance in addition to the formal nuance.

- Issue: Social/economical context
  - Aim: To identify the social and economical aspects and impacts of the energy or environmental issues to be debated. In most relevant decision situations, there are issues of self preservation, interests to be defended and agenda’s behind agenda’s part of the FEED platform is to create more transparency and fairness in the decision process.

Questionary: Stakeholders and Deliberation Process

- Issue: Problem description (issues/ sub-issues)
  - Aim: To summarize and describe clearly the several aspects related to the problem and the impacts of the problem that refer to all the stakeholders. Deliberation processes have more than one layer. Not all aspects are handled at the same time or in a predictable sequence. It helps for the visitor to know in which sub-strand or sub-track of a certain major issue the discussion is evolving. Formal deliberation processes tend to be much more rigid in th topic at hand and the phasing of the dispute in is in informal and open deliberation that people tend to get confused and additional support is required.

- Issue: Level of formality
  - Aim: To define the formality of the aforementioned participation in every stage of the deliberation process per user group. The deliberation process can address issues within a context of open discussion or within the context of a rigid workflow of argumentation and the impact of each could be different. For feed both levels are relevant, since we recognise that informal open discussion are as much part of participation as the formal side of the issue.

- Issue: Problem owner
  - Aim: To identify the entity or authority that has to manage the problem described and take action in order to begin the debate and the deliberation process for the formation of a coherent legislation framework related to the energy or environmental problem-issue.
Domain model for eParticipation

Stakeholders

Main groups of stakeholders in FEED:
- Citizens
- Organisations (Businesses, Academicians,..)
- Public Administration

STRATEGIC, ORGANIZATIONAL AND LEGAL CONSTRAINTS

- The strategic constraints refer e.g. to the problems of engaging stakeholders in political debates.
- Other eParticipation problems which need to be overcome have been identified in the DEMO-net project, see http://www.demo-net.org/:
  - Bad quality of a discourse discourages citizens from participation;
  - Language problems between administrations, organizations and citizens have to be overcome, too. It is important that policy issues are being translated in order to make them comprehensible for citizens.
  - Digital and social divide are further constraints potentially hampering the success and take-up of the FEED offer. As a consequence for the system design, requirements for the design are easy to use and simplicity.
  - The implementation and pilot phase of the system should be accompanied by an initiative to engage stakeholders to participate.

STAKEHOLDER ROLES AND THEIR DEPENDENCIES

- Strategic
- Organizational
- Legal
STRATEGIC, ORGANIZATIONAL AND LEGAL CONSTRAINTS

- Organizational constraints concern the regional political system and public authorities and their behaviour. Beyond that, the processes need to be adjusted and adapted for more participation possibilities and also to clarify the contrast between informative and participatory elements.
- Organizational constraints are certainly affected by technical constraints, which come from the used technologies.
- Legal constraints may result from the bills of law of the different countries and processes. The compliance with legal frameworks has to be secured.
- The system has to be adapted to the different legislative processes to support it in every project partner user.
- The FEED platform has to deal with the protection of privacy in case of the participants on the one side and the publication of documents referring to the legislation process on the other side.

FEED platform architecture

Through the FEED platform, the following main services will be made available to decision-makers, businesses and citizens:

- Introduce issues to be debated in the platform.
- Integrate (through the corresponding annotation) existing content with legislative information and specific Environmental and Energy issues that are deliberated.
- Introduce "rich" informative material (video or audio) that explains and/or refines aspects of the deliberation procedure.
- Retrieve content and express opinions about specific issues through comprehensive and easy to use interfaces – i.e. visualizing the structure of a legal act and enabling users to state opinions upon specific passages.

FEED platform architecture description

- **Content Universal Storage**
  - The Content Universal Storage subsystem is the main storage facility of the system. Its purpose is to hold all the information about the system operation. The Content Universal Storage subsystem stores information using two specific modes:
  - By physically storing data and information of any kind (text, audio, video) in the system database.
  - By storing links (indexes) to external storage facilities and systems (databases, websites/portals, individual machines) where the data are actually stored.
**FEED platform architecture description**

- **Content Annotation and Retrieval**
  - The Content Annotation and Retrieval subsystem constitutes the engine of the entire FEED platform. Its purpose is to annotate the content so that it can be interrelated to specific concepts (i.e. debated issues on the platform, pieces of legal information, specific stages of the deliberation process, etc.) and retrieve federated content that is relevant to a specific user input (i.e. an opinion, a request for informative material, a request for relevant opinions, a request for relevant legislation, etc.).

- **Presentation Layer**
  - The current subsystem constitutes the web front end of the entire platform. Its purpose is to externalize the provided services to the final end users of FEED platform and performing the required user authentication during log on. In broad lines the FEED services...
Thank you for attention

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