



# **Evaluation of Open Source Web-CMS** for E-Participation

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- Introduction
- Criteria for evaluate CMS for e-participation
- Examined Open Source CMS
- Evaluation results of CMS
- Recommendations & Conclusions



## Introduction – OCOPOMO

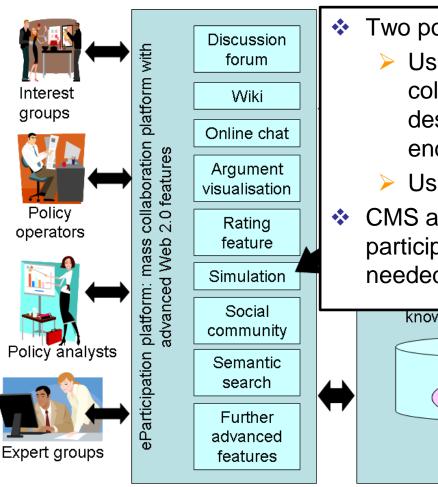


- Develop an integrated ICT platform for efficient policy making
  - Integrating methods of evidence-based scenario generation with formal policy modeling and open collaboration
  - Integrating the methods into a platform of open collaboration among key stakeholders
    - policy analysts, policy operators, wider stakeholder groups of specific policy domains
  - Supporting engagement of wide stakeholder groups in social and economic policy areas of two pilots

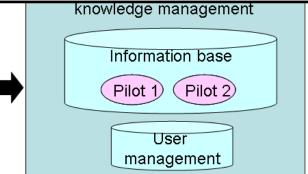


## Introduction – ICT Toolbox





- Two possible approaches:
  - Using existing participation and collaboration tools particularly designed for e-participation endeavors
  - Using standard software like a CMS
- CMS are extensively used in eparticipation, because of wide range of needed functionalities







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# Criteria for selection CMS for eparticipation



#### CMS

- Web publishing, retrieval & browsing
- Multilingualism
- Workflow Engine
- Layout- / Templatingengine
- Content / WYSIWYG editor
- User and rights management
- Single Sign on
- Versioning
- Customizable content types
- Different login mechanism
- Remove Profile



# Criteria for selection CMS for eparticipation



- Community systems
  - Comment content
  - Rating content
  - Online meetings and chats
  - Personalized profiles
- Discussion
- Mailings
- Calendar
- Polling
- Blogging



# Criteria for selection CMS for eparticipation



- Notification
  - RSS feed
  - E-Mail
- Newsletter
- Wiki





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## **Examined Open Source CMS**



- Analyses based on
  - Desk Research
  - Experience in e-participation projects
- The open source web CMS market is dominated by WordPress, Joomla and Drupal [Open Source CMS Market Share, 2009]
  - PHP is still the dominant language for open-source CMS
  - The study also takes into account different.NET, Java, and Python systems



# **Examined Open Source CMS**



CMS system	Reason
Alfresco / Alfresco Share (http://www.alfresco.com)	Most used Java-based web CMS
Drupal (http://drupal.org)	One of the top three used web CMS
Joomla (http://www.joomla.org)	One of the top three used web CMS
Plone (http://www.plone.org)	Most used Python-based web CMS
TYPO3 (http://www.typo3.org)	One of oldest community-backed open source web CMSs
WordPress (http://www.wordpress.org)	One of the top three used web CMS





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## Major deficiencies of individual CMS are as follows:

- ♣ All:
  - No CMS supports to rate contributions in forums
  - A chronological order for topics is not possible
- Alfresco:
  - Content rating not possible
  - Meetings and chats are only available in a beta state
  - No polling functionalities available
- Drupal:
  - Workflow engine is limited
  - Versioning of a poll is not possible





#### Joomla

- Workflow Engine is a simple one
- Versioning is a simple one
- Customizable content types are limited
- Versioning of a poll is not possible

#### Plone

- Login only feasible with user name
- Rate of content is limited





#### TYPO3

- Workflow engine is limited
- Different login methods are only available in a beta state
- Rating of content is not possible

#### WordPress

- Workflow engine is a simple one
- Login is only possible by username or email
- Versioning of polls is not possible





- Most functionalities are provided by add-ins
  - Potential problems with interoperability
  - Not verifiable by desk research
- Support of workflows and versioning
  - Could not be easily implemented afterwards
  - If needed only CMS which provide good support for versioning and workflows should be further considered
- Usability
  - No comprehensive studies could be identified
  - Further research is necessary





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- Analyzed CMS support most general e-participation functionalities
- Tools used are less important than concept and methodological design of participation offerings
- Important for customizing is
  - Technology used
  - Open Source license (GPL 2 or higher)
- Effort for customizing depends on
  - Specific needs of the e-participation project
  - Integration into the overall organizational and technical environment





- Further relevant factors for selecting a CMS:
  - Costs
  - Complexity
  - Security
  - Community
  - Special Features
  - Usability
  - Standards used for interoperability issues
    - Content Management Interoperability Services (CMIS)
    - OpenID
    - others





- Besides of customization, specialized e-participation tools can be used for example:
  - Gov2Demoss
  - Discourse Machine
  - WEBOCRAT
  - others





- What CMS have we selected for the OCOPOMO ICT-Toolbox?
  - > Alfreso
- Why?
  - Technology framework
    - Existing Java based components
  - Support of Standards
  - Existing IT-Knowledge
  - Good support by Community









# Many thanks for your attention!

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#### **Project partners:**























**KSR**