



Where eGovernment meets the eSociety

# Digital Monitoring of societal Discussions in online Social Networks

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## Initial Position:

# Citizens Opinions

<http://www.wegov-project.eu>

Discussing societal issues like *nuclear power*

“Nuclear power phase-out now”

“Nuclear power is low-priced”

“Nuclear power as bridging technology”



facebook

twitter

YouTube™

*Millions of USERS Discussions*

Dialogues Groups

Comments

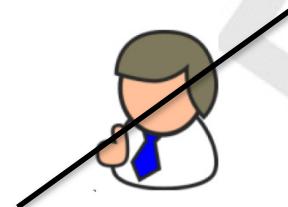
PRO / CON

Topics Suggestions

*Fear*

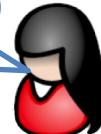
Emotions Worries

Hottest group on topic



Discussing societal issues like *nuclear power*

“Nuclear power phase-out now”



“Nuclear power is low-priced”



“Nuclear power as bridging technology”

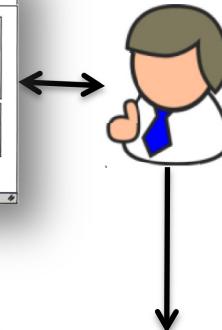


facebook

twitter

YouTube™

# Approach: Toolbox



# Research Project

## WeGov:

- Where eGovernment meets the eSociety
- Funded with support from the European Commission (01/2010 – 06/2012)
- SEVENTH FRAMEWORK PROGRAMME THEME ICT 2009.7.3 ICT for Governance and Policy Modelling
- Consortium

UNIVERSITY OF  
**Southampton**

gov2u

**gesis**  
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for the Social Sciences

**WeST**  
People and Knowledge Networks

**KMi**

**GFI**

HANSARD  
SOCIETY



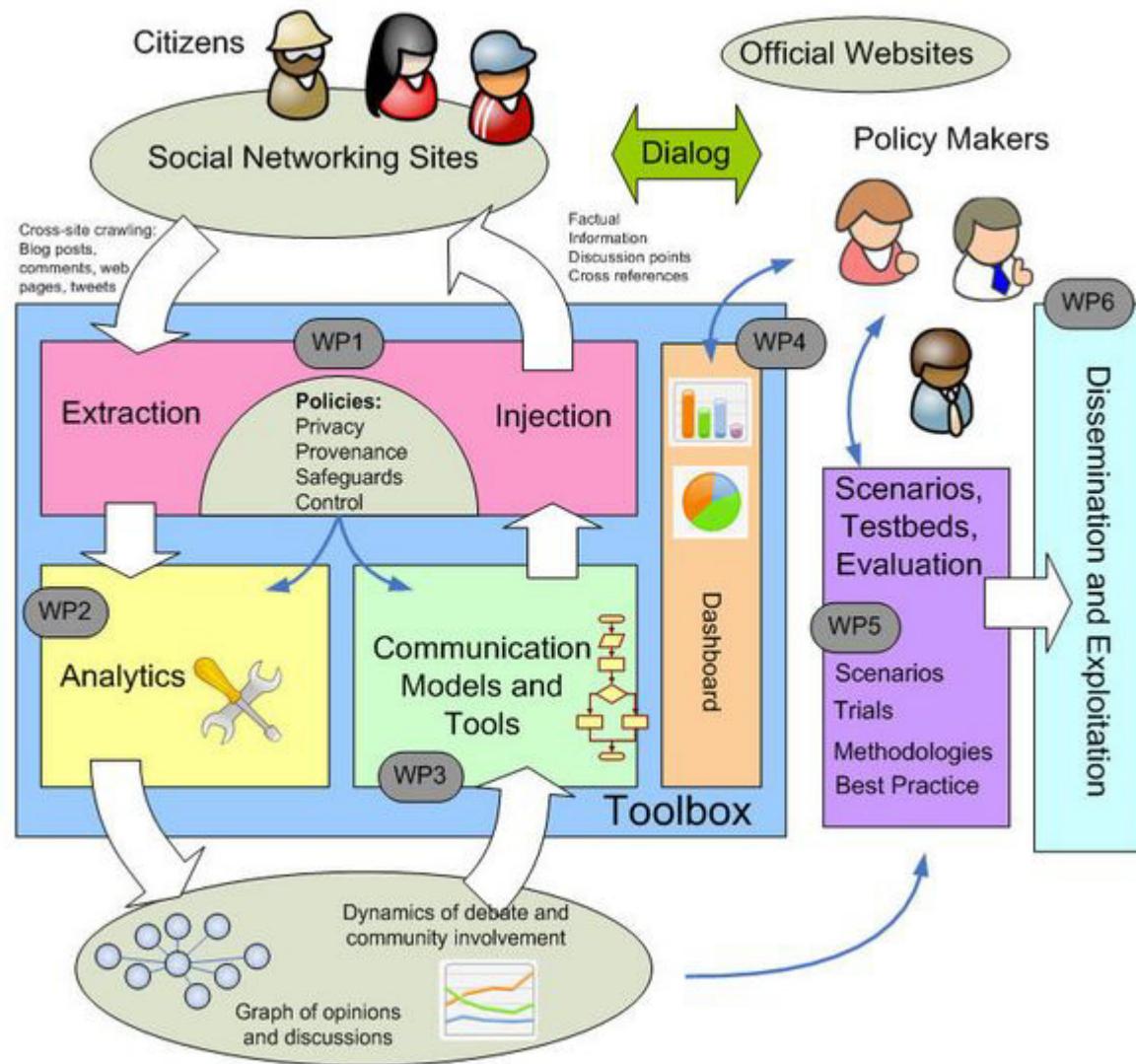
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# Overall Goal

*“Improve the two-way dialogue between citizens and politics throughout the internet”*

*“Instead of developing a new eParticipation platform, WeGov is build-up on the capability of Social Networking Sites”*

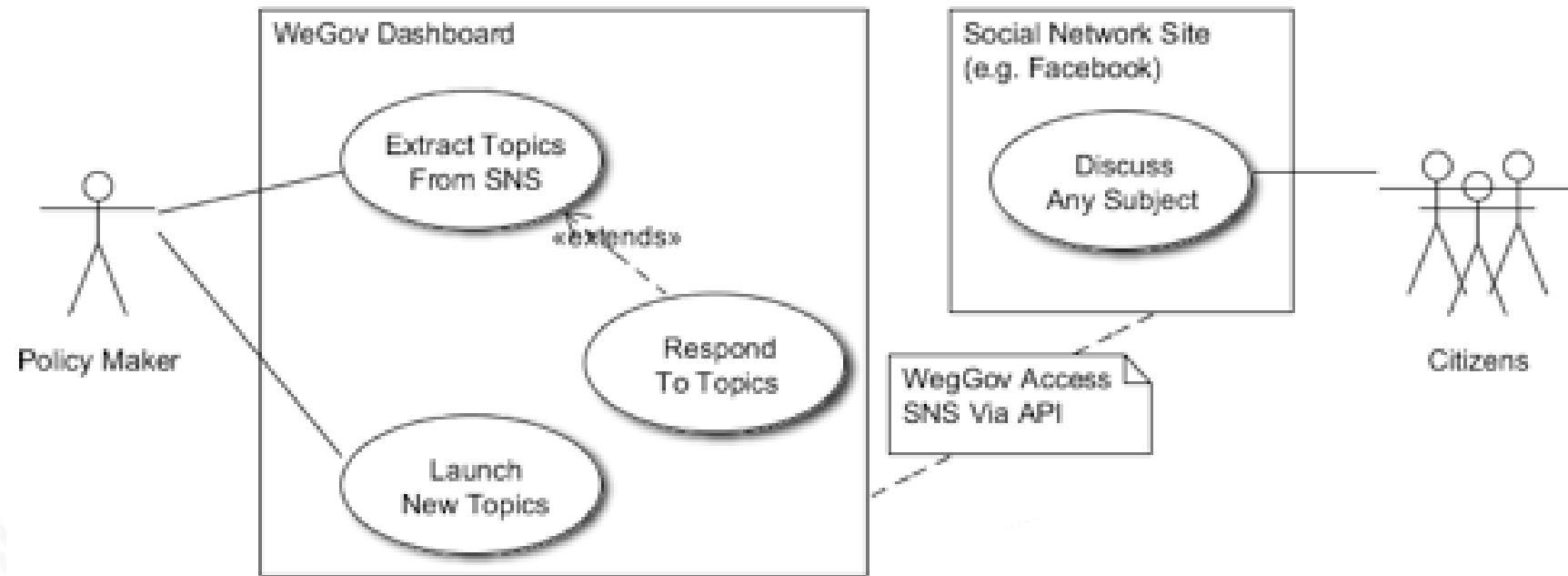
# Graphical Outline



# Status-quo

- Use cases [Joshi *et al.* 2010]
  - **Basic functionality** [Wandhoefer *et al.* 2011]
- Ethical and legal analysis [Joshi *et al.* 2010]
  - Project / policy makers border line (ongoing)
  - Data property / provenance (ongoing)
- Proof of concept prototype [Claes *et al.* 2010]
  - Inject on a Facebook group
  - Rough topic opinion / behavior analysis (Twitter)
- Demonstrate prototype to policy makers (ongoing)

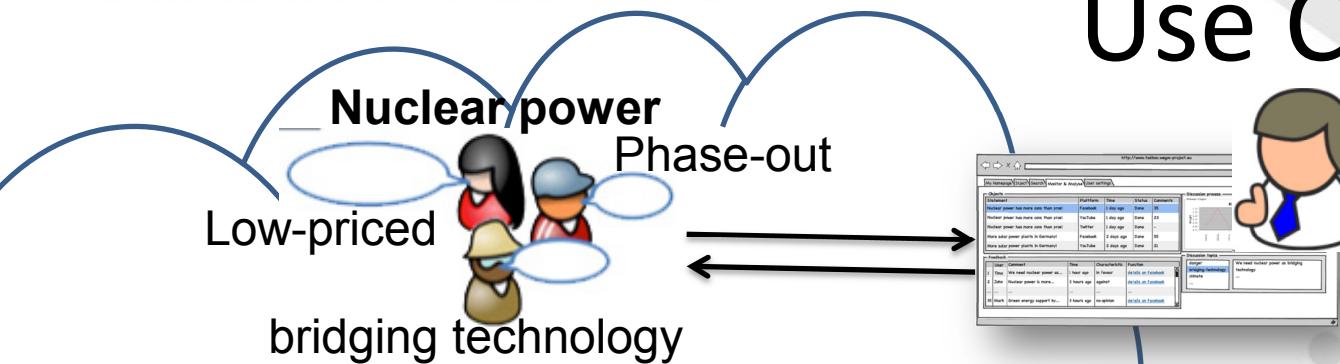
# Basic Functionality: UML Diagram





# Two-way dialogue: Use Cases

<http://www.wegov-project.eu>



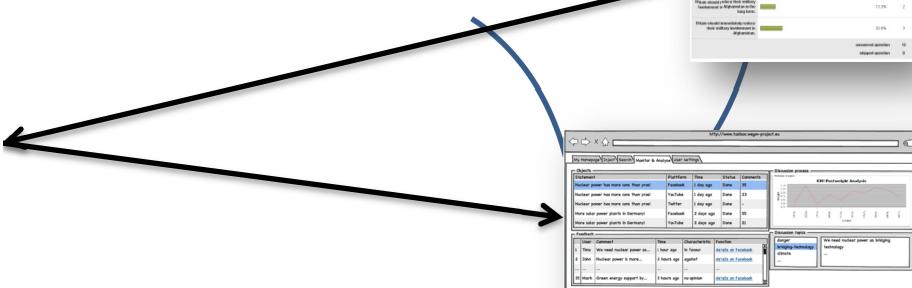
**Monitoring**

**Phase-out with higher energy prices?**



**Inject poll within recommended groups**

**Nuclear power Phase-out**



**Inject poll results to seed a discussion**

**facebook**

**twitter**

**YouTube™**

**Analyze discussion  
(Topic opinion analysis / behavior analysis)**

# Dashboard: How it looks like

<http://www.toolbox.wegov-project.eu>

The screenshot shows the 'Monitor & Analyse' section of the wegov dashboard. It includes:

- Objects:** A table showing statements with their platform, time, status, and comments.
- Discussion process:** A graph titled 'KMI Postweight Analysis' showing the weight of posts over time.
- Feedback:** A table showing user comments with their characteristics and functions.
- Discussion topics:** A clustering of comments into topics like 'danger', 'bridging-technology', 'climate', etc.

- Strongness of opinion expressions (agreement / disagreement)
- [Claes et al. 2010]
  - Topics of discussion (clustering)
  - [Claes et al. 2010]
- Relevant comments (topic)
- Emotional comments (Arousal / Dominance)
- [Claes et al. 2010]
- Measuring discussion activity [Claes et al. 2010]

# Future Work

- Evaluation and assessment of initial toolbox
  - Workshops with policy makers
  - Determine how to make it a day job functionality
- Improvement of initial toolbox
  - Online surveys
  - Analysis tools
    - Measuring users activity/behaviour
    - Citizens opinion and sentiment
    - Identifying citizens' interests
    - Measuring and modelling 'buzz'

→ Toolbox demonstrator Jan '12



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# Vision

*“Get citizens’ opinions be heard by policy makers and make their opinions be part of the policy decision making process”*

*“Enrich the two-way dialogue with scientific information like literature, projects, studies and experts”*



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# Thank you!

For more information please visit

<http://www.wegov-project.eu>

or contact

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# References

- [Wandhoefer *et al.* 2011] T. Wandhoefer, M. Thamm, P. Mutschke, *Extracting a basic use case to let policy makers interact with citizens on Social Networking Sites*, 2011. URL: [http://works.bepress.com/cgi/viewcontent.cgi?article=1006&context=timo\\_wandhoefer](http://works.bepress.com/cgi/viewcontent.cgi?article=1006&context=timo_wandhoefer)
- [Claes *et al.* 2010] A. Claes, S. Sizov, S. Angeletou, J. Reynolds, S. Taylor, und T. Wandhoefer, *D4.2 Initial WeGov toolbox*, 2010. URL: [http://wegov-project.eu/index.php?option=com\\_processes&task=streamFile&id=11&fid=46](http://wegov-project.eu/index.php?option=com_processes&task=streamFile&id=11&fid=46)
- [Addis *et al.* 2010] M. Addis, S. Taylor, R. Fletcher, C. Wilson, F. Fallon, H. Alani, T. Wandhoefer, und P. Mutschke, “New ways for policy makers to interact with citizens through open social network sites - a report on initial results,” *Internet, Politics, Policy 2010: an impact assessment (IPP2010), 16-17 September 2010, Oxford, UK*. URL: [http://microsites.oi.ox.ac.uk/ipp2010/system/files/IPP2010\\_Addis\\_Taylor\\_Nasser\\_Paper.pdf](http://microsites.oi.ox.ac.uk/ipp2010/system/files/IPP2010_Addis_Taylor_Nasser_Paper.pdf)
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