E-Participation on environment-related policies. An assessment of European local government practices.
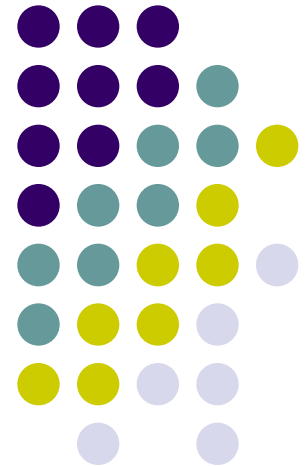
Basilio Acerete, Sonia Royo and Ana Yetano
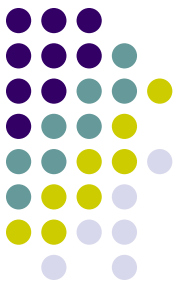
University of Zaragoza (Spain)

http://gespublica.unizar.es/

PACITA Conference
Participation within the Field of Climate Change

Prague,13-15 March 2013

Introduction

- There is an urgent need for meaningful information and citizen participation at the local level to build awareness and increase capacity for promoting action with respect to climate change (Sheppard et al. 2011).

- In environment-related activities, citizens should not only be consulted on governmental action, but they have to make their own contribution by changing their behavior as well.

- Household consumption patterns and behavior have a major impact on natural resource stocks, environmental quality and climate change. Furthermore, projections indicate that these impacts are likely to increase in the near future (OECD 2011).

- In this context, the use of ICTs, and particularly the Internet, may have an important role for informing, educating and empowering citizens.

- The diffusion of the Internet has raised high expectations (increase and improve citizen participation, stop the decline of political engagement and trust), but an 'evaluation gap' exists.

Objective

This paper analyzes the websites of the environment departments of European local governments that have signed the Aalborg+10 commitments, to establish to what extent European local governments are making use of the Internet to promote e-participation and environmentally-friendly behaviors among their citizens.

Additionally, we analyze what factors promote the development of these tools at local level.

Since 2004, more than 600 local governments have signed the Aalborg commitments. These commitments envisage "*cities and towns that are inclusive, prosperous, creative and sustainable, and that provide a good quality of life for all citizens and enable their participation in all aspects of urban life*".

Determinants of e-participation climate initiatives

- Public management culture

  (public administration style)

- Urban vulnerability (to environmental problems and/or climate change)

  (density of population, population growth rate, coastal location)

- External pressures (local residents, city visitors and central gov.)

  (% citizens with tertiary education; Internet penetration; tourist nights per year; National e-environment policies)

- Local government environmental culture

  (membership to ICLEI; Covenant of Mayors plan; participation in the European Green Capital Award)

Methodology

- Data: web content analysis (February-April 2011; 134 items).

- Sample: European cities bigger than 50,000 inhabitants that have signed the Aalborg Commitments.

- 67 European cities in 19 countries: Aus (1), Bel (1), Bul (2), Den (3), Est (3), Fin (5), Fra (4), Ger (5), Gre (4), Ice (1), Ita (8), Lat (1), Lit (2), Nor (3), Port (3), Spa (7), Swe (8), Swi (2) and the UK (4).

- **Transparency** (71 items, grouped into 6 broad categories): general information about the environment department; explanations and instructions of requirements imposed on citizens resulting from the department's activities; general information about environmental issues; information about specific policies and initiatives; indicators and data about sustainability; and information about citizen participation processes in environmental issues.

- **Interactivity** (40 items, grouped into 7 broad categories): possibilities of obtaining information from the department; development of e-services; services to be updated with periodic information; projects with on-line participation (or possibility of signing up to a project online); initiatives to promote responsible behavior; initiatives to allow citizens to express their opinion regarding sustainability processes; and initiatives to participate in sustainable planning.

Methodology (Cont.)

- **Usability** (9 items) refers to the ease with which users can access information and navigate the web portal. General characteristics of the website and online facilities for people with some kind of disability.

- **Website maturity** (14 items) measures the degree of website sophistication.

- Partial scores & Total score (40%-40%-10%-10%)

Statistical techniques:

- Descriptive analysis

- Factors: Univariate and Multivariate analyses.

Univariate analysis: Mann-Whitney test (public management culture, coastal location, ICLEI membership, Covenant of Mayors plan, and Green Capital Award) and Pearson correlations (population density, population growth rate, percentage of citizens with tertiary education, tourist nights per year, Internet access, and national e-environment).

Multivariate analysis: regression analysis (OLS estimation)

Analysis of Results

TRANSPARENCY-ACCOUNTABILITY (71)	71.2
General information about the department (6) Address and telephone, organization chart, number of employees, budget, annual sustainability report , mission statement	67.3
Citizen consequences (4) Information about environment procedures, instructions about environmental procedures, searchable index for downloadable forms or forms to submit online, instructions for appealing against decision-making processes or address of an ombudsman	82.8
General information about environmental issues (14) Strategic plan for a sustainable city, information about causes and probable impacts of climate change, index for reports and publications, drafts of new regulations regarding sustainability, environmental publications in electronic format for free, participation in national or European environmental networks/projects, Agenda 21 project and information, Agenda 21 schools programme and information, information about activities linked to Agenda 21, policies for sustainable local public service delivery, local government sustainable procurement policy, FAQ (environmental topics), environmental glossary, and What's new section	74.5
Information of specific policies and initiatives (41) CO2/energy (5), water (5), waste management/recycling (6), air quality (5), transport and mobility (11), parks and green spaces (5), noise pollution (4)	74.3
Indicators and data about sustainability (3) Sustainability indicators defined, objectives and time frame established regarding these indicators, sustainability indicators reported	32.3
Inf. about citizen participation processes in environmental issues (3) Information about current participatory processes (online/offline), information about the level of participation and results of past participatory processes (online/offline), information about future participatory processes	43.8

INTERACTIVITY-CITIZEN DIALOG (40)	39.2
Obtaining information from the department (5) Department general e-mail, sub-units e-mail, individual employees' e-mail, searchable database for reports, online request for information or publications	68.1
Development of e-services (5) Forms for downloading, provides online form completion and submission, online payment of utility bills, taxes, fines or other government obligations, possibility of making an appointment with officials or staff, provides link to appeal process	67.2
Services to provide periodic information (8) E-mail alerts about new reports/news about environmental topics, RSS feeds about environmental topics, SMS alerts about issues of interest, possibility of redistributing the contents of the web through blogs or social networks, periodic electronic journal about sustainability, information of air quality, water quality and noise pollution updated on the web	29.9
Projects with online participation (or possibility to join online) (8) CO2/energy, water, waste management/recycling, air quality, transport and mobility, park and green spaces, Agenda 21, e-participation processes in the last year	9.3
Initiatives to promote responsible behavior (3) Location of recycling centers on an interactive map, simulators (i.e., of household electricity consumption), journey planner (public transport)	45.0
Initiatives to allow citizens to express their opinion (9) Complaints/suggestion boxes (website), chat, asking for opinions about specific topics (by e-mail; forms), e-consultation (short surveys yes/no; specify preferences), e-consultation (long surveys), blogs, web forum, Facebook page or other type of social network, activity at Facebook official page	43.8
Initiatives to participate in sustainability plans (2) E-rulemaking, e-petition system/e-petitions accepted	25.4

(*) In brackets: number of items in each dimension.

USABILITY	**61.2**
Provides other-language access	46.3
Site map	82.1
A to Z index (alphabetical order index)	41.8
Search engine	97.0
Help section	46.3
Homogeneity of the different subpages	95.5
Text-only or accessible version of the website	59.7
Audio access to the site for people visually impaired	20.9
Conformance icon that guarantees compliance with some accessibility standards	61.2
WEBSITE MATURITY	**54.4**
No broken links	77.6
Last updated within the last month	83.6
Content arranged according to different topics (versus hierarchical structure of the department)	94.0
Credit card payments	85.1
Secure servers (https://...)	91.0
Private areas with passwords are used in order to access personal information	91.0
Site entails the use of digital signature for transactions	88.1
Live broadcast of important speeches or events	19.4
Privacy policy	56.7
Security policy	41.8
Interactive database of indicators	4.5
Indicators downloadable in excel format	4.5
Audio/video files for environment-related activities	19.4
Possibility to comment those audio/video files	4.5

Usability shows a high degree of development in technical items, but low percentages of development in items which enhance the accessibility of websites.

In the website maturity dimension, the technical items and those related to service delivery are the most developed, whereas the items related to innovation and citizen participation, show the lowest scores.

Analysis of Results (Cont.)

Looking at the data of individual cities…

- Average total score of the sample: 55%
- Most local governments obtain transparency scores of over 75% (44 local governments).
- The maximum score obtained in interactivity is 65% and only 12 local governments obtain scores over 50% in this dimension.
- Only 2 cities reach a total score over 75% (Hamburg & Leicester)
- 19 cities (28%) are below 50%.

- Results suggest that, in the initial steps of e-participation, similar importance is given to the four dimensions. When the cities want to improve in this regard, they start by improving transparency and usability, creating great differences in the developments of these two dimensions in comparison with interactivity and maturity.

Factors: OLS regression analysis

	VIF	Transp.	Interact.	Usability	Maturity	TOTAL
				Dependent variable		
Constant		-45.887	34.696*	-76.612	-1.083	-12.246
Public Administration Style	3.310	0.085	0.443**	0.103	-0.413*	0.179
Population growth rate	1.365	0.077	0.078	0.091	0.236	0.107
% Internet access in the region	3.149	0.398*	0.104	0.492***	0.292	0.380**
Tourist nights per year (Log)	1.383	0.244*	0.003	0.231*	0.368**	0.218*
National e-environment	1.842	0.055	-0.149	0.128	-0.072	-0.003
ICLEI membership	1.179	0.003	0.112	0.077	0.049	0.055
Covenant of Mayors plan submitted	1.339	0.220	0.462***	-0.053	0.003	0.281**
R^2		0.483	0.529	0.575	0.318	0.593
Model significance (*F* statistic)		5.331***	6.414***	7.722***	2.661**	8.318***
N		48	48	48	48	48

Main Findings

- E-participation in climate change is still in its infancy in European LG.

- Becoming a signatory of the Aalborg commitments does not always foster the development of e-participation in environment–related topics.

- Developments on e-participation are higher in transparency. When this information requires a greater effort for the local government, the level of disclosure decreases.

- As regards interactivity and citizen dialog, the number of cities providing these interactive tools is much smaller.

- LG show a positive behavior towards e-participation in climate change when the information to be disclosed or the tools to be used do not require much effort. But the offer of real participative projects, up-to-date indicators or e-petitions initiatives, are hardly developed.

- So, the creation of a true e-dialog seems to be still a pending issue for European LG fighting against climate change.

Main Findings (Cont.)

- Transparency is being promoted by most LG. The public management culture affects the degree of interactivity.

- External pressures have proven to have a greater influence on the transparency than on the interactivity dimension.

- With regards to the LG environmental culture, only LG with an active commitment (Covenant of Mayors plan) show greater developments in interactivity and the total e-participation scores.

- Window dressing behavior in order to show an image of modernity, global citizenship and commitment towards the environment, but without promoting significant changes in G2C relationships.

- 'Politics as usual' in the adoption of new technologies.

- It does not seem that the Internet is going to lead to a revolution in G2C relationships or to a convergence in governance styles and decision-making structures.

- The theoretical claims that indicate that the Internet is going to foster a revitalization of the public sphere must be taken with caution.

Thank you!

**Basilio Acerete, Sonia Royo and
Ana Yetano**

University of Zaragoza (Spain)

sroyo@unizar.es; ayetano@unizar.es

http://gespublica.unizar.es/

**PACITA Conference
Participation within the Field of Climate Change**

Prague, 13-15 March 2013