

Deliverable D2.1

User Requirements & Acceptance Criteria

WP 2– Task Number 2.1

Project Acronym: eRepresentative
Project Title: A Virtual Desktop to Support the Mobile Elected Representative
Project Number: FP6-2004-26985
Project Duration: 24 Months
Starting Date: 1st February 2006
Ending Date: 31st January 2008

Type of Document: Public Document
Version Number: 1.2
Deliverable Status: FINAL
Pages Number: 81
Contractual Date: 30 May 2006
Actual Date: 16 June 2006

Responsible Partner: Napier
Authors: Angus Whyte (Napier), Onno van Dommelen, Jordi Puiggali (ScytI), Alexandros Xenakis (Gov2U)
Partners Contributed: HP, Dutch Parliament, Lithuanian Parliament, Catalanian Parliament, Hungarian National Assembly, Westmeath County Council

Project Co-ordinator

Partner Name: Napier University ITC
Name of Representative: Professor Ann Macintosh
Address: 10 Colinton Road, Edinburgh, UK.
Phone Number: +44-131-2545
Fax Number: +44-131-2282
e-mail: a.macintosh@napier.ac.uk
Project WEB site: www.erepresentative.org

History of this document			
Date	Version	Author	Action
6.6.06	1.0	Angus Whyte, Onno van Dommelen, Jordi Puiggali, Alexandros Xenakis	Draft for comment
14.6.06	1.1	As above	Minor changes to clarify wording, correct editing errors, add to non-functional requirements for security.
16.6.06	1.2	As above	Correction to table 1, error transcribing ratings for relative importance of requirements.

Acronym/Glossary	
Ca	Catalonian Parliament
Du	Dutch Parliament (Tweede Kamer)
Hu	Hungarian National assembly
Li	Lithuanian Parliament
We	Westmeath County Council
Committee	Any group of elected representatives that may be set up according to the statutes of an elected assembly, including e.g. commissions, or working parties.
Party Group	Political party represented in an assembly by a number of elected representatives, i.e. a faction or fraction.
PDA	Personal Digital Assistant
WP	Work Package

Table of Contents

1	Executive Summary.....	5
2	Introduction.....	6
2.1	Purpose and Scope of the Report.....	6
2.2	Overall Aims and Assumptions.....	7
2.3	Requirements Gathering.....	7
2.3.1	Outline.....	7
2.3.2	Methodology.....	8
2.4	The Approach Taken.....	11
2.4.1	Questionnaire.....	11
2.4.2	Individual and group interviews.....	13
2.4.3	Online polls – in/out of scope list.....	13
2.4.4	Workshop discussions.....	15
2.4.5	Limitations.....	15
2.5	Further Reports and Next Steps.....	16
3	Drivers of eRepresentative.....	17
3.1	Users of the eRepresentative Desktop.....	17
3.2	Stakeholders affected by eRepresentative.....	18
3.3	Drivers and Goals of the eRepresentative Desktop.....	23
3.3.1	Improved access to legislative documents.....	23
3.3.2	Better reporting of time-sensitive developments.....	26
3.3.3	Improved and more transparent collaboration and consultation.....	28
3.3.4	Remote participation in legislative decision-making.....	30
3.4	Acceptance Criteria.....	32
4	Design Constraints.....	33
4.1	Mandatory Constraints.....	33
4.1.1	Use of DSpace and Pnyx.parliament technologies.....	33
4.1.2	Operation must be non intrusive.....	33
4.1.3	Metadata.....	34
4.1.4	Assembly statutes and constitutional rules apply.....	34
4.2	Relevant Facts and Assumptions.....	35
4.2.1	Anticipated workplace environment.....	35
4.2.2	Identification and Authentication Issues.....	36
4.2.3	Changes to the legislative process.....	36
4.2.4	Impact of related projects.....	36
4.2.5	Availability of legacy system components.....	37
4.2.6	Requirements not met by eRepresentative.....	38
5	Functional Scope.....	38
5.1	The Legislative Services Context.....	38
5.2	Actors' Goals and Use Cases.....	39
5.2.1	Provide inter-assembly search and retrieval.....	40
5.2.2	Track committee legislative actions.....	42
5.2.3	Provide committee events notification.....	44
5.2.4	Provide a secure discussion space.....	46
5.2.5	Provide e-voting support for individual ballots.....	49
5.2.6	Provide remote e-polling for committees.....	51

6	Non-Functional Requirements.....	53
6.1	Look and Feel Requirements.....	53
6.2	Usability and Accessibility Requirements.....	53
6.3	Performance Requirements.....	53
6.3.1	Response time.....	53
6.3.2	Reliability and Availability.....	53
6.3.3	Document capacity.....	53
6.4	Operational Requirements.....	54
6.4.1	Expected physical environment.....	54
6.4.2	Expected technological environment.....	54
6.5	Security Requirements.....	54
6.5.1	Audit.....	54
6.5.2	Authentication.....	55
6.5.3	Authorization.....	55
6.5.4	Privacy.....	55
6.5.5	Integrity.....	56
6.5.6	Non-repudiation.....	56
6.6	Cultural and Legal Requirements.....	56
6.6.1	Cultural requirements.....	56
6.6.2	Legal requirements.....	56
7	References.....	58
8	Annex: Requirements Gathering Instruments.....	59
8.1	Initial Questionnaire.....	59
8.2	Responses to Initial In-Out of Scope List.....	77
	<u>Assembly member interview topics.....</u>	79

1 Executive Summary

The report is of eRepresentative task 2.1 'Gather overall requirements and acceptance criteria'. It reports on work done in the first four months of the project to define the design scope, user needs and working context of the eRepresentative desktop. This software application is intended to support the work of elected representatives at national, regional and local level by making legislative services more effective and more tailored to meet their individual interests and preferences.

Section 2 of the report outlines the contents including the methodology adopted, the steps taken to gather material for this report, and its relation to others project deliverables.

Section 3 'Drivers of eRepresentative' describes the problems or needs for improvement that the eRepresentative desktop is expected to address. After first describing the intended users and other stakeholders affected by the project, three main goals are discussed; timely information; secure access, and support for collaboration. These are then related to each of 4 areas that representatives and other stakeholders consider to be problematic or in need of improvement. The four areas are:-

1. Improved access to legislative documents
2. Better reporting of time-sensitive developments
3. Improved and more transparent collaboration and consultation
4. Remote participation in legislative decision-making

In each case the reasons for change are given. Each area is also linked to *research questions* to be followed up in the Validation and Impact analysis work package. The section provides the *acceptance criteria* considered appropriate.

Section 4 'Design Constraints refers to constraints the eRepresentative design must work within. It also summarises relevant assumptions about the technology and physical environment and the legacy systems provided in that environment.

Section 5 'Functional Scope' outlines the legislative context, and expresses the functional scope in terms of 6 top-level use cases. These are to:-

- Provide Inter-assembly search and retrieval
- Track committee legislative actions
- Provide committee events notification
- Provide a secure discussion space
- Provide remote e-polling for committees
- Provide e-voting support for individual ballots

Section 6 lists non-functional requirements relating to the look and feel, usability and accessibility, performance, operational, security, cultural and legal needs of the assemblies. Finally, *references* are given in section 7 and an *Annex* provides details of the instruments used to gather requirements.

2 Introduction

2.1 Purpose and Scope of the Report

The report is of eRepresentative work package (wp)2 'User Requirements and Best Practice. It reports on work done in the first four months of the project to define the design scope, user needs and working context of the eRepresentative 'virtual desktop' (henceforth shortened to eRepresentative desktop). This software application is intended to support the work of elected representatives at national, regional and local level by making legislative services more effective and more tailored to meet their individual interests and preferences.

The eRepresentative project is part funded by the European Commission¹, to investigate the potential impact of the eRepresentative desktop, i.e. on elected representative's work and the legislative services provided by their assembly.

This first section of the report outlines the contents and approach. The following section 2.2 describes the methodology adopted, and the steps taken to gather material for this report. Section 2.3 identifies project tasks that are excluded from the scope of the current report but will be addressed in further reports

Section 3 'Drivers of eRepresentative' describes the problems or needs for improvement that the eRepresentative desktop is expected to address. After first describing the intended users and other stakeholders affected by the project, three main goals are discussed; timely information; secure access, and support for collaboration. This section also provides the acceptance criteria.

Section 4 'Design Constraints' refers to constraints the eRepresentative design must work within. It also summarises relevant assumptions about the technology and physical environment and the legacy systems provided in that environment.

Section 5 'Functional Scope' outlines the legislative context, and expresses the functional scope in terms of 6 top-level use cases.

Section 6 lists non-functional requirements relating to the look and feel, usability and accessibility, performance, operational, security, cultural and legal needs of the assemblies.

Finally, references are given in section 7 and an Annex provides details of the instruments used to gather requirements.

¹ Partners are: Napier University, ScytI, Gov2U, HP, Dutch Parliament, Lithuanian Parliament, Catalonian Parliament, Hungarian National Assembly, and Westmeath County Council

2.2 Overall Aims and Assumptions

The project explores the extent to which a novel combination of information management, mobile technologies and security systems can be designed to enable information sharing and access to large-scale information repositories to provide elected representatives with a mobile, personalised working environment.

The eRepresentative desktop application is therefore intended to provide support for the elected representative to:-

- Get an overview of facts and opinion relevant to current political issues
- Form an opinion together with party colleagues and other stakeholders in the decision-making process
- Make decisions on the appropriate legislative action

The focus of the application is the legislative process, and mainly the scrutiny of legislation through relevant committees.

The rationale for this development is grounded firstly in current eGovernment research priorities, which seek technology support for improvements in the efficiency, inclusiveness, openness and accountability of public services and democratic processes.

Technologies that provide greater interoperability between information systems, personalisation to their users' interests, and greater access through mobile devices are widely seen as potential tools for such improvements (ref.). Secondly, the project is premised on elected assemblies' seeing potential in these technologies to enable good governance, and willingness on the part of elected representatives, and the information management specialists who support them, to explore the challenges in doing so.

2.3 Requirements Gathering

2.3.1 Outline

The overall aims of WP2 is to define the "eRepresentative" requirements in terms of the principle electronic legislative activities that they need to support in both the participating elected assemblies and in a cross-section of other assemblies across Europe, so as to ensure that the results are as generic as possible and can be exploited as widely as possible.

The more specific focus of task 2.1 is to gather the overall requirements and expectations of the elected representatives and define acceptance criteria. To meet that objective we set ourselves 8 main questions, which are addressed in this report.

1. What are the gaps that assemblies and their elected members would like eRepresentative to fill, in terms of the current support they provide for representatives to gather information, formulate opinions and preferences and take part in legislative decision-making?

2. How are those activities currently carried out, by which 'actors', and using what media?
3. Why are those activities in need of improvement using eRepresentative, according to elected representatives?
4. What criteria are used to assess the value of those activities that can be used as acceptance criteria for the eRepresentative desktop?
5. How can the variety of issues and problems facing different assemblies and representatives be expressed as a shares set of eRepresentative drivers and goals?
6. What organisational or cultural issues may affect development of the eRepresentative desktop?
7. What are the perceptions of representatives and other stakeholders regarding what functions eRepresentative should carry out, given the above context?
8. What are the assemblies' priorities for developing the eRepresentative desktop?

The approach to addressing these questions involved:-

- Questionnaires completed by assembly IT managers on the priority areas for improved support to representatives, and current systems and technical infrastructure.
- Individual and group interviews with elected representatives and other stakeholders, conducted face to face in each assembly.
- Online polls of the assembly partners on the scope of requirements. These were carried out using the project's collaborative environment.
- Follow-up workshop discussions of the eRepresentative goals, principles and constraints and high-level functions that assembly partners' consider desirable and feasible.

2.3.2 Methodology

The methodology has two main elements which address progressively more specific aspects of the requirements:-

- Soft Systems Methodology: project drivers, goals, constraints and acceptance criteria.
- Volere Requirements Model: actors, goals, and top-level use cases

This report provides a high level user view of the requirements, to be followed up by documentation of functional requirements and detailed definition of how they are to be validated. Those tasks will continue through Months 5-10 in the transition from the user requirements (wp2) to architecture (wp4), and validation & impact assessment (wp7) work packages.

To begin with the work package has adopted a Soft Systems Methodology (SSM) approach. This is a loosely structured and flexible way of enquiring into how problems are framed; a form of action research, in that it assumes that the

researchers' role, like the designers, is to intervene and change a problem situation in collaboration with clients and 'problem-owners' (Checkland and Scholes, 1999).

Elements of SSM have been found helpful in formulating eGovernment project scope in terms of drivers, stakeholders, goals and constraints (e.g. Whyte and Macintosh, 2002, Heeks, 2005). The approach highlights these questions, which closely match those we identified in the outline above:-

- (a) Who is the 'client' of the project, and what are their priorities and assumptions about it?
- (b) What issues arise when intervening in the situation?
- (c) Who "owns" or is in charge of the activities the project is intended to support?
- (d) Who are the "actors", i.e. who does the work that is currently involved?
- (e) Who should benefit or be affected?
- (f) What should we take as given, e.g. what is the current technical infrastructure, and what constraints are relevant?
- (g) How are conflicting interests currently resolved?
- (h) What are the norms, roles and values of current practice?

Questions (a) to (f) are important for identifying the scope and were the subject of questionnaires and interviews. Questions (g) and (h) underlie the research questions to be addressed through evaluation of the eRepresentative pilots.

SSM also involves modelling the activities that these questions relate to, but at a more general and informal level than the UML diagrams used to model the legislative document production process and associated (legacy) information systems in eRepresentative wp1. In SSM activities are modelled using a form of bubble diagram, as a basis for structured dialogue with users and key stakeholders about what it is feasible and desirable to change. In eRepresentative we have not made explicit reference to SSM or used these diagrams with eRepresentatives intended users².

Rather than use abstract models to envision the changes to practice intended and implied by eRepresentative, we anticipate that *scenarios* will be more effective in this role and more familiar to eRepresentative partners. These will be developed further in project task 6.1 (Pilot plan and scenario development) to inform the later stages of prototype development.

In the current phase of the project, the *Volere requirements process* (Robertson and Robertson, 1999) has helped to define the design scope. The approach provides a widely adopted and adaptable specification template and process model for requirements gathering and analysis³. It is consistent with the *use case* method of representing external system behaviour from the user's point of view (e.g.

² We have used the methodology to its full extent, although in many cases the methodology places greater emphasis on the questions asked of a 'problematic situation' than the use of diagrams to carry out that enquiry (Checkland and Scholes, 1999).

³ Parts of this document's structure and content are informed by the Volere Requirements Specification Template and we acknowledge the Copyright © 1995 – 2004 of the Atlantic Systems Guild Limited

Cockburn, 2001). At this point the role of the Volere process has been limited to defining high level use cases and non-functional requirements of eRepresentative, rather than the detailed functional requirements the process is designed to articulate.

Following this report, wp4 will further define the requirements, using storyboards and usage scenarios to prototype them with the intended users. This will be carried out in parallel with a *rapid application development* approach to integrating into the assembly's current systems the software agent, document repository and security technologies provided by technology partners Gov2U, HP and Scytl.

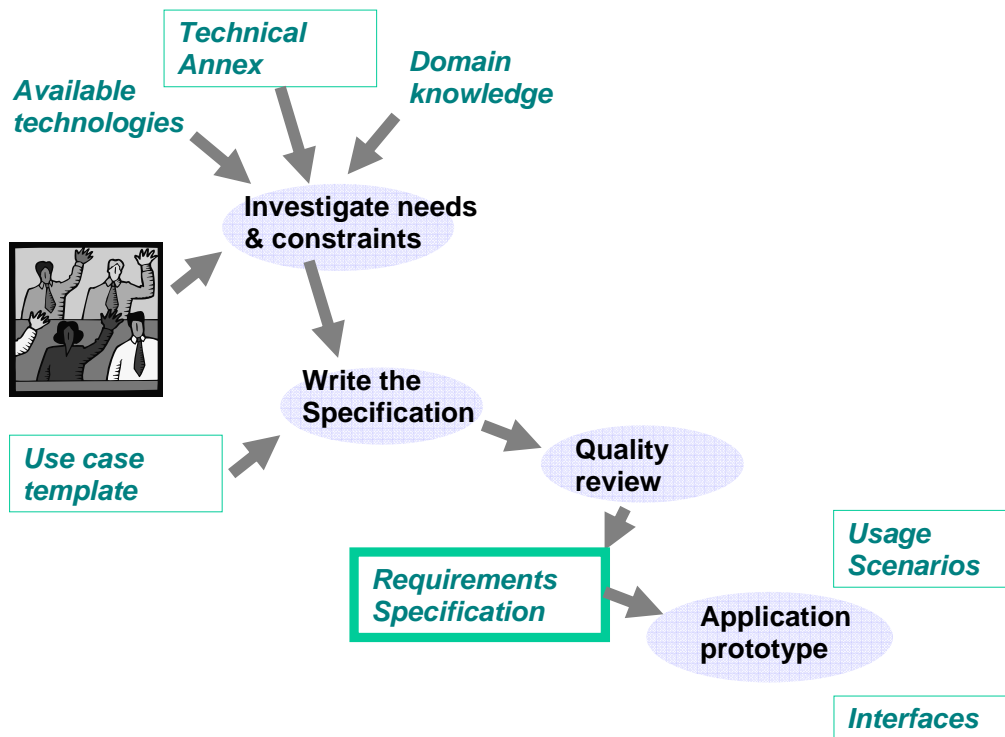


Figure 1. Overview of requirements process

2.4 The Approach Taken

2.4.1 Questionnaire

A questionnaire was developed in Month 1 for completion by the assembly partners. It characterised 7 activities that work package leaders Napier considered suitable candidates for the support envisaged in the eRepresentative work plan. The assemblies were invited to comment and were asked detailed questions relating to the activities, focusing on the following main questions:-

Q1. Considering the phases of the legislative process that you have identified for wp1, what are the *main activities* you think can be improved most in this project?

Below are some activities eRepresentative may support. Please indicate below to indicate to what extent these are activities that are (a) currently supported by some online tools, and (b) are important for eRepresentative to support.

- (a) *Find information* relevant to legislative action, by *searching/browsing and retrieving*:-
- i. Internal archives of committee proceedings, background papers, other official publications; structured lists of these, e.g. bibliographic databases, shared bookmarks, metadata
 - ii. External websites, including subscription services
 - iii. Direct communications between representatives and citizens/interest groups (email, fax, voice), records of prior contacts or presentations/ documents submitted by them to representatives.
 - iv. Indirect communication between representatives and citizens/interest groups, i.e. results from consultation forums, surveys, focus groups etc.
- (b) *Manage information* from the above sources; i.e. categorise documents/messages, categorise individuals groups to communicate with; edit categories (metadata); relate items to each other.
- (c) *Manage legislative document (proposal, amendment, conclusions)* i.e. create the document, submit document to official secretariat, get notification of status, edit categories (metadata); relate items to each other.
- (d) *Gather comments on legislative document*, i.e. make documents available to identified group categories (e.g. parliamentary groups, committee colleagues, broadcast tv, press, spokespeople for citizen groups or lobby groups); store/retrieve comments received; analyse comments to ascertain general preferences.
- (e) *Conduct poll/vote* on alternatives, i.e. define closed list of choices, define mechanism for choosing between them, make choices/ votes, store and retrieve choices, analyse choices made to ascertain general preferences.

Gather signatures i.e. provide a means for individuals or groups to add their name to indicate support for proposals, authenticate identities, store/retrieve these names.

Formatted: Bullets and Numbering

Publicise decisions, i.e. Make documentary evidence of committee decisions available to identified groups in the assembly, and externally.

Other activities or comments on the above

- Q2. What is the 'added value' of these activities... what factors do you think representatives/ other stakeholders currently see as important when judging their success or failure?
- Q.3. What projects are underway that you consider directly related to eRepresentative?
- Q.4. What are the relevant characteristics of elected representatives?
- Q.5. What should we take as given in defining requirements for eRepresentative?
- Q.6. Who is involved in providing representatives with legislative information, and the tools to manage it?
- Who has day-to-day responsibility for managing the activities you expect eRepresentative to help manage?
 - Who else is involved or affected, i.e. stakeholders?
 - Which of these do you expect to become end-users of eRepresentative?
- Q.7. Where do representatives meet?
- Q.8. How are conventional media used in communications between representatives and assembly staff
- Q.9. How are digital media used in communications between representatives and assembly staff?
- Q.10. How are digital media protected?
- Q.11. How is your assembly's technical *infrastructure* used to support legislative activities?
- Q.12. How do you currently *test software for acceptability* to your users?

The full questionnaire is included in Annex 1 (p.)

From the responses more focus was placed on online collaboration as the focus of "*gather comments on legislative document*".

2.4.2 Individual and group interviews

The questionnaires were followed in Month 3 by visits to each assembly, where individual and group interviews were held with:-

- Elected representatives: 3 MPs in Catalonian Parliament, 1 MP in Lithuanian Parliament and 3 Councillors in Westmeath County Council.
- Senior specialists on the legislative process: senior members of staff from Secretariat and/or Legal departments in each participating assembly.
- Senior information and technical staff directly involved in the project from each participating assembly

The general topics for discussion were:-

- *Your experience with ICT, and your parliamentary/ council work*
- *How you and colleagues currently use the intranet in the legislative procedure, and where else it would be useful to access it.*
- *What eRepresentative should do, and what qualities it should have.*
- *What groups of people or organisations you need to share draft legislative documents with securely.*
- *What criteria you would use to assess whether eRepresentative makes your work easier.*

The more detailed questions are included in Annex 1.

2.4.3 Online polls – in/out of scope list

To help refine the scope two “in and out of scope” online polls were held in the project’s ‘eRoom’ an online collaborative environment for the partners. The format (given in Cockburn 2001) is a simple list of anything under consideration for the design scope, with a vote to identify the level of consensus on whether each is ‘in’ or ‘out’.

The first of these polls was carried out in parallel with the interviews described above. As a result, the activity ‘gather signatures’ was considered out of scope, as was the use of live (streamed) audio or video broadcasts.

A further poll was carried out following the interviews. This asked each assembly to rate the level of importance for each of 6 activities, which elaborated and refined the descriptions used in the initial questionnaire. These are shown in table 1 below.

Key: 3=very important; 2= quite important, 1=interesting but not important

	Requirement	Benefits sought	How important	
1	Provide facility to find, store/retrieve documents from other European assemblies, according to user-defined relationships with current legislative issues or proposals. Share search results with identified colleagues.	Increase rep's opportunities to consider matters related to draft proposals, in other parliaments' experiences	Ca Du Li Hu We	1 1 3 2 2
2	Provide notification of committee events, e.g. agenda, minutes, time remaining in committee schedule for amendments to selected legislative proposals	Increase time available to MPs to consider amendments and their colleagues positions on related issues	Ca Du Li Hu We	3 3 2 3 3
3	Provide timely information on status of legislative proposal and related amendments, with history of changes to these, positions of party groups/member, and related comments; make information public at discretion of committee chair.	As above, plus improve transparency of committee process.	Ca Du Li Hu We	3 3 1 3 3
4	Provide facility to share and invite comments on agreed issues or proposals and background information, with facility to restrict access by identified groups of committee/ party/ or inter-parliamentary colleagues or interest group representatives, and to vary the level of security accordingly.	Enable committee members to be better prepared for meetings by increasing opportunities to consider others' positions, and views of interest groups on issues at hand. Improve structured interaction with interest groups. Improve support for party groups to form views on proposals prior to their formal introduction to the parliament.	Ca Du Li Hu We	3 3 2 1 3
5	Provide committee members with a facility to remotely indicate their preference(s) to other members of the committee, at the discretion of the committee chair.	Enable committee members unable to be present at meetings to perform their role (or collaborate to perform it)	Ca Du Li Hu We	1 3 - 2 1
6	Provide members with facility to record their vote electronically and remotely, on matters appropriately decided by individual ballot.	Explore whether voting, counting and scrutiny may be performed more efficiently or conveniently. Enable in especial cases (e.g. MP ill at home) to participate in the chamber voting if necessary.	Ca Du Li Hu We	1 3 - 1 1

Table 1. Activities where eRepresentative support is considered important.

The 'benefits sought' column in table 1 is a condensed summary of 'drivers' that are elaborated on further in section 3.3. It is important to note that when asked to rate the importance of each requirement, the assembly representatives were asked to base their rating primarily on the needs of their *own* assembly, but also to take account of the need for eRepresentative to take account of what they considered to be *generic* needs of similar assemblies.

2.4.4 Workshop discussions

Following the visits to assemblies, Napier met with technical partners HP, Gov2U, and Scytl to review the outcomes, the overall scope in terms of the above activities, the main actors, user goals and acceptance criteria, and to review interface mock-up possibilities. This was followed by a further meeting with the assemblies on the transition to work package 4, facilitated by HP at the Dutch Parliament during the second consortium meeting.

2.4.5 Limitations

The requirements discussions benefited from the participation of seven elected representatives. The senior members of assembly staff are highly experienced and well understand the needs of other representatives. However we cannot claim that the results are representative of the views of other representatives in their own or other assemblies. Rather, they are a starting point for developing a prototype whose relevance to other representatives needs the project as a whole will test.

While greater participation by representatives is highly desirable, eGovernment research generally faces difficulties attracting user participation. As Oostveen & van den Besselaar (2005) point out, international e-Government "involve many different user categories, coming from different countries with different cultural backgrounds, opinions, norms and values, all influencing the requirements, expectations, evaluation and acceptance of the new technology". In addition, they say, in large scale projects participatory techniques can rarely be used to engage users directly in the design, and need further development with methods of technology assessment if they are to address the more general political and normative dimensions.

These challenges are more acute where, as in this project, elected representatives are target users. As one of our assembly partners pointed out, it is difficult to engage them in articulating requirements since in their first year after election MPs are busy getting familiar with their role and in their final two years they are busy preparing for the next election. Coupled with this, in the Hungarian National Assembly the discussion of requirements in this project coincided with a general election, and in another the intended participants had to attend a plenary session at short notice. Although it is not a primary focus of the project, it will be a valuable contribution to research to address the challenges of involving elected representatives in design are

2.5 Further Reports and Next Steps

This report is best read in conjunction with the following reports produced before or in parallel to it:-

D2.2 (A) Elected Assemblies' current practice in supporting the mobile representative.

The report describes current practice in the eRepresentative assemblies' provision of web-based legislative information and secure mobile working environments to support elected representatives. It summarizes the similarities and differences between the legislative environments and the support provided. A separate Annex (for internal circulation only) describes the security practices currently applied and includes preliminary recommendations on best practice.

D1 Legislative process modelling and report on existing legacy systems

Provides UML modelling of the participating assemblies' legislative document production process and legacy systems.

D2.3 User interface requirements

Describes interface and decision support requirements, elaborating on the top-level use cases and non-functional requirements defined in this document (D2.1). D2.3 also provides qualitative assessment of elected representatives' familiarity with technology in the participating assemblies.

Further work is planned to develop the contents of this report and those above. In particular, forthcoming reports (in brackets) will develop the contents as follows:-

- Develop more detailed security recommendations (*D 3 Report on Privacy Enhancing Technologies in elected assemblies*).
- Refine the top level use cases and to more fully documented functional requirements with accompanying storyboard (*D 4.1 Storyboard and architecture*)
- Develop the use cases and storyboard into a narrative format, to elicit feedback from representatives and other stakeholders. (*D 6.1 Pilot plan and detailed application scenario*)
- Define detailed validation and evaluation indicators to assess the functionality of the eRepresentative desktop and impact of the pilots (*D7.1 Validation and impact Assessment Methodology*)

It is important to note that the requirements represent the assemblies' and representatives needs as far as they are known at this stage in the project and should be taken as mandatory for development. Any change in requirements will be documented to record the agreement of the elected assembly partners

3 Drivers of eRepresentative

3.1 Users of the eRepresentative Desktop

The main intended users of the eRepresentative Desktop are elected representatives in national, regional and local assemblies. Members of these assemblies are in principle as diverse as the communities they are elected to represent.

In practice some broad generalisations can be made about characteristics considered relevant to the takeup of internet technologies, both in parliaments and generally. However figures included in the table below are *estimates* from data available, and should not be considered statistically valid.

<i>User category</i>	Elected representative, other authorised participants in committee meetings	Senior representative or staff member (e.g. Committee chair or clerk)	IT or information management staff
<i>User role</i>	Content user	Content administrator Voting chair	System administrator, Translator
<i>Subject experience</i>	Low to High	High	High
<i>Technology experience</i>	Low	Low to Moderate	High
<i>Education</i>	High	High	High
<i>Linguistic skills</i>	High native language skills, multiple languages used	High native language skills, multiple languages used	High native language skills, multiple languages used
<i>Age group:</i>	Approx 90% in 30-60 age group, typically 45-55	45-65	25-45
<i>Gender:</i>	Approx 75% male	Approx 75% male	unknown
<i>Physical abilities/disabilities</i>	Some age-related visual impairments should be expected	Some age-related visual impairments should be expected	unknown

Table 3.1 User categories and roles

Notes on categories and sources

Subject experience : this refers to representatives experience in their legislative role and knowledge of the assembly's procedures and working practices. Newly elected representatives may have no previous experience in that role, whatever other relevant

knowledge or experience they have. However those responsible for chairing committees are likely to have considerable experience, as will senior staff responsible for serving such groups.

Technology experience: A more detailed account is given in eRepresentative report D2.3.

Education: Although no data was available from the assemblies it is assumed that representatives are typically educated to degree level or equivalent.

Linguistic skills: this refers to communication skills as well as to fluency in languages other than those normally spoken in the assembly

Age group: based on figures provided by the Catalanian and Lithuanian parliaments.

Gender: based on figures provided by the Catalanian and Lithuanian parliaments. Westmeath County Council is more predominantly male (20 compared with 3 female Councillors).

Physical abilities/disabilities visual impairment is known to increase with age, but no specific data on this or other disabilities among representatives is available from the assemblies.

3.2 Stakeholders affected by eRepresentative

The participating assemblies are the *client* of the eRepresentative development process, and their IT functions (represented in the project) are also the *customer*. However it should be emphasised that the aim of the development is not to create bespoke applications for the 5 participating assemblies but one that is sufficiently generic to be useful for all elected assemblies, mainly (but not exclusively) in Europe.

The actors involved are described below for each of the assemblies. The table is based on the assemblies' questionnaire responses, and refers to generic activities that eRepresentative is intended to support, rather than to the specifics of the legislative process (detailed in report D1).

It is important to note that eRepresentative is not expected to replace legacy systems currently used in the legislative document production process, but to integrate data drawn from them. Thus assembly staff who are actors in that process and end users of the legacy systems are expected to have limited involvement as end-users in the pilot of an eRepresentative prototype

1. *Find information* relevant to legislative action, by searching/browsing and retrieving from internal and external sources.

Ca. *Day to day management:* Parliamentary studies department
Other stakeholders: Parliamentary Management Department, Parliamentary Groups, Political party
Expected end-users: All of them plus members and Legal Department

Du. *Day to day management:* Clerc's Office, Standing Committees
Other stakeholders: the Clerc, the committee clerks, MP's staff
Expected end-users: see above + MP's + citizens

- Hu.** *Day to day management:* General Secretariat
Other stakeholders: Parliamentary groups , committees
Expected end-users: as above + MPs and citizens
- Li.** *Day to day management:* Assistants
Other Stakeholders: IT Department
Expected end-users: MPs
- We** *Day to day management:* Appointee of the Director of Services from the

Support Staff in Functional Area associated with SPC
Other Stakeholders: SPC Members (made up of elected representatives and sectoral representatives), Director of Services (DOS) and his/her appointee.
Expected end-users: SPC members, DOS

2. *Manage information* from the above sources; i.e. categorise documents/messages, categorise individuals groups to communicate with; edit categories (metadata); relate items to each other.

- Ca.** *Day to day management:* Parliamentary studies department
Other Stakeholders: Parliamentary Management Department, Parliamentary Groups, Political party
Expected end-users: All of them plus members and Legal Department
- Du.** *Day to day management:* Clerc's office
Other Stakeholders: committees
Expected end-users: committees, staff of the Clerc's office
- Hu.** *Day to day management:* General Secretariat
Other Stakeholders : Parliamentary groups , committees
Expected end-users: as above + MPs and citizens
- Li.** *Day to day management:* Assistants
Other Stakeholders: ITD
Expected end-users: MP
- We** *Day to day management:* Appointee of the Director of Services from the

Support Staff in Functional Area associated with SPC
Other Stakeholders: SPC Members (made up of elected representatives and sectoral representatives), Director of Services (DOS) and his/her appointee.
Expected end-users: SPC members, DOS

3. *Manage legislative document (proposal, amendment, conclusions) i.e. create the document, submit document to official secretariat, get notification of status, edit categories (metadata); relate items to each other.*

- Ca.** *Day to day management:* Parliamentary Management Department, Members, Parliamentary Groups, Legal Department
Other Stakeholders: Linguistic Department
Expected end-users: All of them
- Du.** *Day to day management:* Clerc's office and committees
Other Stakeholders: committees
Expected end-users: the Clerc, the committee clercs, MP's staff + MP's + citizens
- Hu.** *Day to day management:* General Secretariat
Other Stakeholders: Parliamentary groups, MPs
Expected end-users: as above + citizens
- Li.** *Day to day management:* Secretariat of Plenary Sitings
Other Stakeholders: ITD
Expected end-users: MP
- We** *Day to day management:* Appointee of the Director of Services from the support Staff in Functional Area associated with SPC
Other Stakeholders: SPC Members (made up of elected representatives and sectoral representatives), Director of Services (DOS) and his/her appointee.
Expected end-users: SPC members, DOS

4. *Gather comments on legislative document, from identified groups of representatives and others who need to be consulted*

- Ca.** *Day to day management:* Presidential Department, Members, Parliamentary Groups.
Other Stakeholders: IT Department, Public Awareness
Expected end-users:
- Du.** *Day to day management:* committee clercs
Other Stakeholders: MP's, committee staff
Expected end-users: the Clerc, the committee clercs, MP's staff + MP's + citizens
- Hu.** *Day to day management:* General Secretariat
Other Stakeholders: MPs, committee staff, video studio, IT staff

Expected end-users: as above + citizens

- Li.** *Day to day management.* Secretariat of Plenary Sittings, Committees
Other Stakeholders:
Expected end-users: MP
- We** *Day to day management.* Appointee of the Director of Services from the support staff in Functional Area associated with SPC
Stakeholders: SPC Members (made up of elected representatives and sectoral representatives), Director of Services (DOS) and his/her appointee. Constituents of elected representatives and represented groups of sectoral representatives.
Expected end-users: SPC members, DOS

5. *Conduct poll/vote* on alternatives, i.e. define closed list of choices, define mechanism for choosing between them, make choices/ votes, store and retrieve choices, analyse choices made to ascertain general preferences.

- Ca.** *Day to day management.* Parliamentary Management Department, Legal Department *
Stakeholders: Presiding Board, Committee boards *
* All of them only on the conservation point of view, not for analyze.
Expected end-users:
- Du.** *n/a*
- Hu.** *Day to day management.* IT and clerical staff, General Secretariat
Stakeholders: Presiding Board, MPs, Committee boards
Expected end-users: everybody
- Li.** *n/a*
- We** *Day to day management.* Appointee of the Director of Services from the support Staff in Functional Area associated with SPC
Stakeholders: SPC Members (made up of elected representatives and sectoral representatives), Director of Services (DOS) and his/her appointee.
Expected end-users: SPC members, DOS

6. *Publicise decisions*, i.e. Make documentary evidence of committee decisions available to identified groups in the assembly, and externally.

Ca. *Day to day management:* Publications Department, IT Depart., Public Awareness.

Other Stakeholders: Linguistic Department, Parliamentary Management Department, Parliamentary studies department

Expected end-users:

Du. Day to day management: automatically out of back office system

Other Stakeholders: Clerc's office

Expected end-users: Expected end-users: the Clerc, the committee clerks, MP's staff + MP's + citizens

Hu. *Day to day management:* General Secretariat (committee staff + legal departments)

Other Stakeholders: committee members, civil group, committee staff

Expected end-users: Parliantary secretariat of government, MPs, political groups, civil organisations.

Li. *Day to day management:* Committees

Other Stakeholders: ITD

Expected end-users: all internet users

We *Day to day management:* Appointee of the Director of Services from the support staff in Functional Area associated with SPC

Other Stakeholders: SPC Members (made up of elected representatives and sectoral representatives), Director of Services (DOS) and his/her appointee. Constituents of elected representatives and represented groups of sectoral representatives.

Expected end-users: SPC members, DOS, Constituents, Represented Groups, Citizens.

3.3 Drivers and Goals of the eRepresentative Desktop

This section describes *drivers*, i.e. problems or areas where improvements are sought and which the eRepresentative desktop is expected to address, together with the *goals*, i.e. how the desktop is expected to address them.

Three overall goals are presented below. These are to provide support for representatives to do the following:-

- Obtain personalized, specific, filtered data 'anywhere, any place and anytime'
- Collaborate with each other and appropriate stakeholders, securely and conveniently
- Influence the legislative process in a timely and convenient manner

Following each of the sub-heading below, in italics, the goals are related to each of 4 areas that representatives and other stakeholders consider to be problematic or in need of improvement. The four areas are:-

1. Improved access to legislative documents
2. Better reporting of time-sensitive developments
3. Improved and more transparent collaboration and consultation
4. Remote participation in legislative decision-making

In each case the reasons for change are given, referring to the assemblies from which they arose as themes from discussion with the user panels. Each area is also linked to research questions to be followed up in the Validation and Impact analysis work package.

3.3.1 Improved access to legislative documents

Improve representatives' access to legislative documents by providing personalized, specific, and filtered information in a timely manner

There are two aspects to the need for improved access; firstly relating to the legislative work of the representatives' own assembly and secondly relating to other assemblies.

3.3.1.1 The representatives' own assembly

The general rationale for using eRepresentative to address issues of document access is partly one of technological convenience and partly driven by changes in the policy making environment.

The technological rationale is that, while most of the assemblies are well served by intranet access to databases of legislative documents, these are either not available remotely (intranet/extranet) or, if they are, they are not designed to provide access on mobile devices (report D2.2 describes the provision in more detail).

For representatives, improved access from mobile devices offers the promise of convenience but comes with risks of information overload. The experience of the

Hungarian National Assembly is important to note. Their e-Parliament programme provided a 'push' service to MPs, i.e. a personalised electronic dossier of documents related to the MP's parliamentary business for the forthcoming week. This was emailed to MPs every Friday, with links to the Assembly's portal. MPs reportedly felt overloaded, and the project concluded that the 'push/pull' balance should shift towards 'pull'

A broader rationale can be found in the policy making environment. Hungary, in common with other EU member states, has recently introduced Freedom of Information legislation. Assembly staff are charged with applying to the operation of the same assemblies that passed the legislation. The publication on the web portal of all legislative proposals, amendments and voting results was regarded as a revolutionary step for Hungarian democracy. Committee minutes have recently been added to the range of routinely published documents, and are published as the verbatim transcripts.

While it is common for the participating assemblies to publish minutes, as well as other reports, these minutes are not considered very easy to digest (not only in Hungary). According to our participants in the Catalanian Parliament and Westmeath County Council, representatives would benefit from the availability of summaries of the meetings, linked to the documents discussed on the agenda. Westmeath currently have successfully deployed a system to publish committee agendas linked to documents to be discussed on the agenda, which they wish to improve on.

The format of an actions summary report produced by the chair of the Catalanian Parliament environment committee suggests a possible way forward, particularly since it is intended to provide a related benefit to representatives. This is the need to *track the status* of legislative proposals by being made aware sooner of the committee chair's record of committee members' positions on amendments.

These positions may of course change between meetings, but the committee chair's record of what has been agreed in a meeting shapes the subsequent political discussion, and the ability of committee members and their party colleagues to respond effectively. We return to this need below under 'Better reporting of time-sensitive developments' and '*transparent collaboration and consultation*'.

Issues and research questions

Senior civil servants are aware that to address elected assemblies needs requires careful attention to possible conflicts between the facilitating roles of the civil servants who administer assembly business, and the political roles of the politicians they serve. Standardised ways to report committee deliberations, and provide access to such reports, and the documents discussed, may provide advantages in terms of efficiency, effective communication, and transparency.

Those advantages may be apparent to civil servants, yet seen by committee chairs and members as unwarranted intrusion into their right to report their meetings as they see fit. Although we did not encounter such a view, it was apparent that committees vary substantially in working practices, and in policies regarding publication of their deliberations, both between and within assemblies.

The research questions on this theme therefore focus on the pros and cons of standardising how committees present their deliberations and associated documents, and on whether remote access to these documents allows representatives to realistically make use of them.

Q1. What characteristics of online document and delivery formats do committee members consider helpful to accessing legislative documents between meetings, and how do those characteristics fit with varying committee practices regarding confidentiality and accountability?

Q2. To what extent do eRepresentative desktop attempts to standardise the representation of committee actions affect the facilitating role of assembly staff?

3.3.1.2 Legislative actions of other assemblies

Interest among representatives on our user panels in the legislation passed in other assemblies was strongest in Lithuania, and regarded with interest in each of the other assemblies. Inter-assembly document exchange can be considered from several angles:-

Horizontally: i.e. access by local, regional and national assembly members to legislative documents of others at the same 'level'.

Vertically, i.e. access to legislative documents of assemblies at a different level.

In each case the main rationale is for representatives to learn from the legislative activity of their colleagues who have or are addressing similar issues. Horizontal exchange faces language barriers, at least among national assemblies. Vertical exchange is considered by some assemblies (Westmeath County Council and the Dutch parliament) to offer representatives some benefits when it is lined to horizontal exchanges between assemblies at the regional or local levels. National assemblies may need to consult them on legislative initiatives affecting them, with the executive arm of national government acting as an intermediary between these levels.

The scope for eRepresentative to improve inter-assembly document exchange must therefore be well focused, since it is limited by the scale of the issues involved and the existence of better established alternatives. The participating assemblies (with the exception of Westmeath) already benefit from using the *Eurovoc* thesaurus to promote information exchange, and from the activities of the ECPRD (including the IPEX initiative for online exchange of legislative responses to EU law).

Assemblies providing access to repositories of each other's legislative documents may provide a better stimulus for the sharing of experiences between elected representatives. Those on our user panels in Lithuania, Catalonia and Westmeath considered comparative law to be a common information need, and eRepresentative as a means to improve access to reports from committees with similar remits.

Although the assemblies provide expert legal advice on the subject, and commercial services also exist, these may not be as effective in stimulating peer-

to-peer exchange as can be accomplished by linking shared repositories to collaborative tools for representatives, which we return to below.

Issues and research questions

A key issue and research question is the extent to which the terms used to describe legislative proposals, by the information specialists in each assembly, are translatable across their boundaries. This is partly addressed by the availability of common descriptors, implemented in the Eurovoc thesaurus (used in the national and regional assemblies).

Eurovoc descriptors support multi-language retrieval. However the effectiveness of any controlled vocabulary in giving precise search results is limited by issues of synonymy (different terms with similar meanings) and homonymy (similar terms with different meanings), which are likely to be made worse by differences in working practice between assemblies e.g. in the number of terms typically used to describe documents.

Effectiveness may also be impaired if descriptors are used to refer to legislative issues that have particular meanings within different nations' legal systems. For example van Laer (1998) mentions the term "family provision" as one with different meanings in English and continental European legal systems.

Language translation issues are of course significant and an additional issue. Assemblies have limited resources for human translation, and eRepresentative cannot add to them. However representatives themselves have language skills and often have contacts in other assemblies. One possibility to be explored then is the extent to which eRepresentative can help representatives to overcome language barriers by drawing on the language skills of their colleagues contacts, in their own and other assemblies.

These and other contextual factors are likely to affect the eRepresentative impact, and give rise to the following questions:-

Q3. What characteristics of document descriptors most affect the elected representatives' ability to retrieve documents from other assemblies' collections that meet their relevance criteria?

Q4. What characteristics of search functionality and the terms used to express legislative issues relevant to elected representatives in one assembly help them to find documents from another assembly that are considered relevant to the same issue by its elected representatives?

3.3.2 Better reporting of time-sensitive developments

Improve access to time-sensitive legislative information by providing personalized, specific, and filtered data 'any place, at any time'.

Representatives involved in pre-legislative scrutiny in committees they are members of need to keep track of a variety of events if they are to make an effective contribution. Moreover, they may want to contribute their views on matters under discussion in committees they are not members of, through party colleagues who are.

The assemblies' current internet and intranet services provide access to both personal and legislative agenda details, but some of the representatives on our user panels looked for better integration of these, to allow them to be notified about developments they are interested in. The technical barrier here is that although personal schedules are accessible remotely, legislative schedules detailing forthcoming committee events are an intranet-only service, or where information is published on the Internet it is not designed for access on mobile devices.

The area seen as most in need of improvement is notification of the period during which committee members can make amendments to legislative proposals. This is a fixed length period (e.g. 15 days in the Catalanian Parliament), and effective notification is seen as offering representatives better opportunities to use that time effectively.

Representatives from the Catalanian Parliament felt it particularly important to improve coordination of information on the *status* of amendments. They use email quite extensively to circulate amendments and comment on them. However this can create its own problems, since it is often unclear which version of an amendment is the final one, i.e. the version registered with the Secretariat. The need, then, is for representatives to be able to choose to automatically receive notification when an amendment has been registered, for a particular legislative proposal.

This need was also felt by representatives who are interested in the work of committees they are not members of. MPs in Catalonia and Councillors in Westmeath gave examples of recent committee discussions where they would like to have contributed their views to the committee member of their own party, but which they had learned about only after the event.

Committee chairs, clerks and support staff could (in principle) manually notify representatives about such events. We do not have detailed information from the assemblies on the extent to which they already do that using scheduling applications such as Microsoft Outlook. However from the views expressed by their user panels, the assemblies are confident that an automatic notification service, triggered by the uploading of documents of particular types (e.g. agenda, minutes, papers) can improve on current provision.

Issues and research questions

A lesson drawn from the Hungarian National Assembly's e-parliament initiative was the difficulty of getting an appropriate balance between a 'push' and 'pull' service. In other words, emailing detailed information that apparently matches a representative's committee roles or interests may be counterproductive if the representative feels that the information is not specific enough or there is simply too much of it. Also, representatives on the user panels commonly said they received too much email.

It seems plausible to conclude that a notification service should provide as little information as possible, but with links to as much as is needed, as often as requested, and only on the topics the representative wants. However that presupposes that representatives can be provided with a consistent menu of possibilities across all relevant committees, and that the choices are to a level of detail that suits their needs. That may be difficult to achieve when committees vary in their working styles and their chair's computing skills. Similarly there may be

more obvious benefits to the representatives who make use of the service than the support staff whose effort is needed to upload the relevant documents on time.

Moreover, the effectiveness of a notification service will depend on whether it is practical for the representative to act on the information received when he or she gets it. For example an email giving notification that the opposing party has registered a new amendment may be of limited use if the representative receives it on a 'smart phone' while travelling, but the text of the amendment is several pages long and it is only practical to read it when back in the office.

Q5. What characteristics of notification content, device form and location of use do committee members think help them receive and act upon timely information on their committee work, and which act as barriers?

Q.6. What trade-offs are required between individual effort and perceived benefits from improved coordination, on the part of:-

- *committee chairs, clerks and support staff -to define generic notification events and provide the information to trigger notifications*
- *representatives- to define a personal profile of events and topics that interest them*

3.3.3 Improved and more transparent collaboration and consultation

Improve representatives' access to views of colleagues and experts, by providing a convenient remote and secure capability for them to collaborate, and for others to influence the legislative process in a timely manner.

The need for eRepresentative to enable committee members and others to share comments online has three main drivers:-

- i. To increase the opportunities to share each others' positions on matters raised (or to be raised) in their in-person meetings;
- ii. Improve support for party groups to form views on the need for proposals (or amendments) before registering them with the secretariat.
- iii. Improve structured interaction between committees and interest groups they wish to consult, including groups in *other* assemblies where relevant.

The first of these needs was most important to the user panel in Westmeath County Council. Their Strategic Policy Committees meet relatively infrequently (about once per quarter), resulting in a need to maintain continuity of the discussions between meetings. The need was also thought important by user panels in Hungary and Lithuania, to help MPs make more productive use of their time between meetings.

As one would expect, representatives have informal discussions with colleagues in the assembly buildings, by email and on the phone. However as these have no formal relation to committee business they are not transparent, in that they are not accessible to all members or anyone else other than their direct participants. Also for members who live far from the assembly buildings (e.g. 80

miles for one of our Catalonian participants), informal meetings can be inconvenient to arrange.

The *second* need, to improve support for party groups to discuss proposals or amendments *before* they are registered has strong security implications. The need, expressed by the Lithuanian Parliament's secretariat, is for members to register proposals that are better informed.

This would require very secure online discussion, and for users to be able to easily and confidently address their comments to members of their party groups (or any other group of users). Addressing this need carries high risks since, although there is no suggestion of favouring particular party groups, it may be difficult to ensure each has an equal level of support.

The *third* need extends support for online discussion to groups that committees wish to consult. The need, expressed by the Catalonian Parliament and Westmeath County Council is closer to the model of parliamentary online consultation which has been pioneered by the Hansard Society with the UK Parliament (e.g. Hansard Society, 2006).

Online consultation does not necessarily involve opening online discussion to the public as a whole. The UK Parliament's experiments began with 'closed' consultations, i.e. where particular individuals deemed to have in-depth knowledge or experience are invited to take part in a password-protected discussion. Similarly the committees in eRepresentative assemblies either include non-representatives in a different category of membership (Westmeath) or have the power to invite them to give expert testimony. In other cases, e.g. Catalonia, the parliament has existing online mechanisms for public consultation.

A special case is inter-assembly discussion. As for Inter-assembly document exchange, considered earlier, this may be between assemblies at the same or different 'levels' (local regional or national).

Issues and research questions

The use of a discussion facility for (secure) communication between members of the same party raises similar issues to those mentioned for supporting standardised online committee reports- an increase in the assembly administration's facilitative role may imply crossing into territory regarded as party political. In all our participating assemblies' party political discussions of proposals before registration are highly confidential. The extent to which the need can be addressed is therefore an important practical research issue.

The value that participants perceive in taking part is also a key issue here. Previous online parliamentary consultations in the UK have, for some, had unmet expectations of vigorous debate between elected representatives and members of the public. Other participants have felt the experience worthwhile as a way to appreciate unfamiliar views or life experiences (Hansard Society, 2006). The criteria for 'valuable online discussion' are likely to vary between assemblies, e.g. where MPs are regarded mainly as delegates of their party rather than as representatives of constituents.

Q7. How do issues of secure access affect participation in online discussion between members of the same political party, and the role of assembly staff in facilitating the legislative process?

Q8. What factors affect the value to committee members of online discussion on issues of common interest to their colleagues and other consulted stakeholders in their own or other assemblies?

3.3.4 Remote participation in legislative decision-making

Enable representatives to participate in decision-making while away from their assembly location, by providing a convenient remote and secure capability for them to express preferences or record their vote.

Representatives and assembly civil servants are interested in remote voting or (non binding) polling on legislative decisions. Three of the five assemblies participating in eRepresentative currently use electronic voting systems to record votes in the assembly chambers (in plenary sessions). What they do not do, and now wish to explore, is electronically record the votes of members who are *not present* in the normal place of voting, whether that is the assembly chambers or a committee room.

Representatives in the Catalanian Parliament talked of e-voting as a way of easing pressures on them to attend committee votes. Committee members do not always have to be present in committee meetings. In certain cases, e.g. illness or looking after children, they can choose a proxy from the same party to act for them in a meeting. In some committees there are also informal pairing arrangements. However there have recently been very close election results, placing pressure on such arrangements that make online (remote) working more attractive. The acceptability of remote working in committees would however depend very much on the views and working practices of the committee chair

Representatives in the Dutch Parliament saw an e-voting pilot as the most potentially valuable contribution to be gained from eRepresentative. Unlike their peers elsewhere, committees in the Dutch parliament do not vote on legislative proposals or on amendments to them. Voting on legislative proposals is carried out in plenary sessions. The committee responsible for scrutinising a proposal comes to a decision on whether its final report on it is ready for deliberation in plenary session. This may involve a show of hands if no clear consensus results from discussion of the report. This is not seen as a vote, but as a decision on procedure which is not necessarily made public.

In this case – and potentially in other assemblies- remote participation may best take the form of *online polling*, i.e. where each member can select their preferred answer to one or more closed questions (e.g. ‘do you want to approve the report on proposal X?’) and the results are visible to all members.

The Dutch Parliament’s interest is not limited to committee meetings however. Voting in plenary sessions can take several forms (summarised in report D2.2), one of which is a secret ballot of members present in the chambers. This is known as ‘voting for persons’ since it applies to the election of individuals to particular posts, including that of President of the House. The procedure involves counting paper ballots which is regarded as time consuming.

Issues and research questions

There is an important barrier to remote participation in decision-making, whether in the form of a binding secret vote or a preliminary poll. With the exception of the Dutch Parliament, it is common in the participating elected assemblies for the standing orders or parliamentary statute to *require* members to attend committees in person. Moreover there is strong public pressure on representatives to be seen to be present in plenary sessions. As assembly proceedings are commonly televised and/or streamed live on the assembly's web portal, representatives are conscious that the public only consider them to be performing their role when they are visibly present in the chambers.

These are significant barriers to e-voting or any other form of remote participation in meetings. A convincing case would be required for assembly's to change their statutes to permit remote participation. The Catalanian Parliament offers a precedent for this, since its standing orders were changed following a previous pilot of Scytll's Pnyx.parliament technology.

A pilot of e-polling and/or e-voting therefore needs to gather detailed evidence for and against deploying this technology. That can be practically accomplished by providing a committee with a fictitious legislative case, inviting them to act out an e-voting scenario, and discussing the consequences with them and other stakeholders from parliamentary bodies

Q9. What factors affect the ability of committee members to participate remotely in their committee's decision-making?

Q10. What evidence do representatives and other stakeholders consider relevant to the case for amending assembly statutes that currently require in-person attendance by committee members?

3.4 Acceptance Criteria

The criteria below were derived from the project plan by Napier and each of the user panels in the assemblies was asked to indicate which were relevant to their own needs and expectations. In the table below the assembly's name (abbreviated) is shown in bold for criteria that were particularly emphasised by their panel members.

1. More effective use of time	Ca, Li, Hu
2. More convenient access to views of colleagues, experts, others involved in the issue debated (e.g. constituents, represented groups)	Ca, Li, Hu
3. More convenient access to information	Ca, Li, Hu, We
4. Improved security of communications with people or information	Ca, Hu
5. Added traceability/ transparency of legislative actions	Ca, Hu
6. Wider range of relevant information and media types	Hu
7. Faster availability of information	Ca, Li, Hu, We
8. Easy/ easier to use information systems	Ca, Du, Li, Hu
9. Improved cost efficiency of information provision	Hu

In work package 7 Validation and Impact Assessment these criteria will be refined into metrics which relate the eRepresentative functions to the research questions on take-up and impact.

4 Design Constraints

4.1 Mandatory Constraints

4.1.1 Use of DSpace and Pnyx.parliament technologies

The project has been planned on the assumption that technologies provided by technology partners HP, Scytl and Gov2U will be deployed in the eRepresentative desktop application. These are (respectively) DSpace and Pnyx.parliament, which are to be integrated through intelligent agent technology developed by Gov2U as described briefly below.

Scytl's *Pnyx.parliament* platform is an electronic voting solution for Parliaments and Assemblies. It allows elected representatives to cast their votes from any computer with an Internet connection and a Java enabled web browser, using a very user-friendly interface, thus enabling members to participate in the vote even if it is not possible for them to be physically present during the session. Pnyx.parliament supports several authentication methods and includes special cryptographic solutions to guarantee the e-vote is as secure as the traditional one based on electric systems or in a show of hands.

DSpace is an open source digital asset management (content management) system co-developed by HP Labs and MIT. DSpace currently uses a qualified version of the Dublin Core metadata standard. It enables institutions to:

- capture and describe digital works using a submission workflow module
- distribute an institution's digital works over the web through a search and retrieval system
- preserve digital works over the long term

The eRepresentative project envisages using Gov2U's agent applications to integrate DSpace and Pnyx.parliament, to provide:-

- Document authenticity verification
- "Trusted" federation of content among assemblies' repositories
- Content organisation
- Dynamic/customised views of search results

It is important to note that DSpace is conceived as a solution for digital *archiving* requirements. It does not currently meet the full range of requirements that have been articulated in this report. Meeting these requirements may require the integration of other off-the-shelf open source software.

4.1.2 Operation must be non intrusive

This principle is needed to reflect:-

- the mission-critical nature of the assembly systems that eRepresentative must interact with;
- the need to avoid deploying in any assembly functionality that is already provided in its existing systems.

A further principle that follows from the above is that read and write access must be defined by functionality. In other words, eRepresentative must only read

from legacy systems and must only write to them where this is essential to a stated requirement and according to explicitly defined rules that do not adversely affect legacy systems performance.

4.1.3 Metadata

The eRepresentative project does not add to the assemblies' human resources for routinely maintaining the metadata used to describe legislative documents. Therefore metadata should as far as possible be automatically created from currently held data. Since the assemblies currently use the Eurovoc multilingual thesaurus to describe and index their legislative documents, the metadata schema to be implemented in eRepresentative must be capable of mapping existing Eurovoc descriptors to eRepresentative metadata as effectively as possible.

4.1.4 Assembly statutes and constitutional rules apply

The standing orders and any other rules or policies of each participating assembly must be observed in the design and piloting of eRepresentative. In certain cases – particularly e-voting- it is clear that changes in these rules would be required for eRepresentative to be fully deployed.

In such cases the technical and assembly partners will identify any functions that do not comply with current rules, so that the necessary permission can be obtained for the relevant function to be piloted on an experimental basis.

The assembly partners are expected to take a proactive role in advising the technical partners of relevant statutes or policies that may affect a pilot of eRepresentative and are not explicitly referred to in this document.

In general terms it is assumed that eRepresentative should comply with the following assembly rules.

4.1.4.1 Participation in committees and other groups

Assembly statutes (or local government legislation and council policies, in the case of local assemblies) define the procedures for an assembly to set up committees and other formal groups such as working parties or enquiries.

There is no assumption that eRepresentative should be *restricted* to formal groups, but it is assumed that their support will be needed to initiate any informal groups that may wish to use eRepresentative, e.g. for online collaboration. In fact that support is essential if eRepresentative is to provide benefits to committees.

4.1.4.2 Attendance at meetings and implications of these

It is assumed that eRepresentative will enable members of committees to be absent from meetings only with changes to any relevant statutes. Statutes define the conditions for representatives to attend meetings, whether of plenary sessions or formal sub-groups such as committees.

As previously mentioned it is common for attendance to be compulsory. Moreover, (with the exception of the Dutch Parliament) non-attending members may have their place and participation rights taken by a substitute, and statutes typically define rules for selecting these substitutes. The following are available in English:-

Dutch Parliament: Article 34 of the Rules of Procedure of the House of Representatives concerns attendance at meetings but does *not* state that attendance is compulsory.

Hungarian National Assembly: Standing Order 13 states that it is the duty of a member to attend “the sittings of the committee of which he is a member”. Standing Order 37 states that “committee members shall participate at the sittings of the committee in person or by way of a proxy.” A proxy commission is valid for one meeting only.

Lithuanian Parliament: Article 10 of the Statute states that a member must participate in the committee meeting he or she is a member of. Article 11 states that non-attendance must be reported to the Commission of Ethics and Procedures at the end of each month.

4.1.4.3 Confidentiality of documents

It should be assumed that the confidentiality of documents used by committees is at the discretion of the committee chair. There is general assumption that (registered) legislative documents subject to formal scrutiny procedures are public. However this is not always the case with committee papers and reports. Specific exceptions include:-

Dutch Parliament: Article 37 states that committee meetings are normally public, but that a committee may decide to hold its procedural meetings in private. Article 38 states that “Secrecy shall be observed with regard to the content of confidential documents and the exchange of views in a private Committee meeting, with the exception of what the Committee states in its report.”

Lithuanian Parliament: Article 180 states that discussions of a committee appointed to consider the position on a proposal to adopt a legal act of the EU must be confidential.

It is not assumed that eRepresentative pilots will be used in any confidential committee meetings. However it is important that the design provides that confidentiality can be maintained whenever a relevant assembly authority decides that it should be.

4.2 Relevant Facts and Assumptions

4.2.1 Anticipated workplace environment

The eRepresentative desktop is intended for use in a variety of locations, including: -

- Committee rooms in the assembly buildings
- Transient locations, e.g. public areas in and around assembly buildings or transport stations, where connectivity may be unreliable
- Home office, where access may be by dialup, and there is a corresponding need for response time to be acceptable for low bandwidth connections.

.It is important not to assumed that committee rooms will have network access, or that those that do have the facilities for each person attending to physically connect a laptop to a network point. However for the purposes of the pilot phase of the project it is expected that the participating assemblies will provide suitable facilities, including equipment purchased for the purposes of the project.

Restrictions on the use of mobile phones and laptops in plenary sessions or committee rooms vary between assemblies. As a general rule it should be noted that background noise from electronic equipment is unlikely to be tolerated.

4.2.2 Identification and Authentication Issues

It is common practice representatives to share their account login details with assistants. This has direct implications for the implementation of eRepresentative functions that require representatives to be identified and authenticated, particularly where a high level of security is needed.

This particularly affects e-voting and it is therefore important to note that in the Dutch parliament current practice is that every user account is assumed to be used as a group account, in the name of the individual MP, by the MP's assistants.

4.2.3 Changes to the legislative process

The legislative process is subject to change and one participating assembly, the Catalanian Parliament, has indicated that changes are likely to occur within the project lifetime.

4.2.4 Impact of related projects

Related projects are expected to impact on eRepresentative to the extent that results are of mutual interest. The assemblies are not aware of specific dependencies that would affect the pilots, scheduled to begin in April 2007 (project month 15). The related projects are shown in Table 4.1 below:-

<i>Catalonian Parliament</i>
<ul style="list-style-type: none">- Mobile office (Hardware and software suite for the members day-to-day work outside Parliament seat)- SIAP (documental DB with electronic signature and certificate registration with mobile devices communication capabilities)- Eecat platform (document electronic signature and certification with local governments)- Pnyx.Parliament (electronic voting prototype)- Parliament of Catalonia intranet portal (intra-Parliament collaborative working platform)- Democracy web (members-citizens relationship platform)- Procedure and control of execution of the bill

<i>Dutch Parliament</i>
<ul style="list-style-type: none"> - Parlis. Parliamentarian (human) workflow and documentation management system. Contains all process and document information. Publishes directly to internet. Free access for citizens, members, etc. - VLOS. Hanzard workflow system. Is connected to Parlis. Optimizes the internal process, publication of concept reports, editing. Adds meta data of the meetings on the fly, directly to the document. - DBG. Pointing meta data to live audio and video streams. Connecting Parlis data to audio and video streams. Creating on demand, integrated audio and video fragments. - Centre Court. Datawarehouse architecture based on middleware software. Objective is to connect all parliamentarian databases on XML.
<i>Hungarian Parliament</i>
<ul style="list-style-type: none"> - None
<i>Lithuanian Parliament</i>
<ul style="list-style-type: none"> - MP's information system
<i>Westmeath County Council</i>
<p>Westmeath County Council will be implementing a Content Management Solution for our intranet and internet sites, incorporating content management services, accessibility and dual/multi-language facilities. This project is due to be completed by September 2006.</p> <p>There is the possibility of a substantial refurbishment of the Council Chambers in County Buildings Mullingar, which will include a new ICT fit-out (network cabling etc), audio visual equipment, furniture etc. Not sure at this point if this will take place during the time-line of eRepresentative.</p>

Table 4.1 Assembly project related to eRepresentative

4.2.5 Availability of legacy system components

It is assumed that legacy systems will be able to provide real-time access to historical & current data in the form of:-

- User directory data
- Personal agenda data
- Legislative agenda data
- Legislative documents and related metadata records
- The world wide web

4.2.6 Requirements not met by eRepresentative

Two main functional areas have been considered out of scope for eRepresentative design; *collaborative editing* and *streamed audio or video*

- Collaborative editing is a complex requirement that was not considered feasible within the available resources.
- Streamed audio and video was ruled out of scope on the grounds that it would not be practically possible to implement application level security.

5 Functional Scope

5.1 The Legislative Services Context

The eRepresentative desktop will deliver its functions to support the work involved in scrutinising legislation and to integrate with other services that support that, as described at a high level in earlier sections of this report and in other deliverables.(D1, D2.2 and D2.3).

To define the scope and boundaries of eRepresentative in detail the volume and nature of legislative documents need to be detailed. Legislative document structures will be documented in greater depth in work package 4. It is important to note though that the available details of these from the Catalanian, Hungarian and Lithuanian Parliaments show wide variations can occur between national and regional assemblies:-

Catalonian Parliament

Volumes: from 1996-2006 the average number of legislative proposals (not including amendments) registered per year is 57, of which on average 20 are passed. Per committee meeting, the number of legislative proposals on the agenda ranges from 0 to 4, and other documents discussed range from 1 to 89.

Length of legislative proposals ranges from 1 to 350 pages, on average 26. Amendments to these proposals range from one paragraph to 50 pages.

Hungarian Parliament

Volumes: the most recent figure currently available are for the 2002-2004 period, during which the average number of legislative proposals (new laws) passed per year was 44, average number of amendments passed per year was 45.

Lithuanian Parliament

Volumes: the number of legislative proposals for the year to January 2006 is 1072 (including amendments), of which 531 were passed. Per committee meeting, the number of legislative proposals on the agenda ranges from 1 to 10, averaging 3.

Length of legislative proposals ranges from 1 to 500 pages, on average 20. Amendments to these proposals range from one to 10 pages, averaging one.

5.2 Actors' Goals and Use Cases

An Actor-Goal list and top-level use case is given in this section for each of the following six requirements:-

- Provide Inter-assembly search and retrieval
- Track committee legislative actions
- Provide committee events notification
- Provide a secure discussion space
- Provide e-voting support for individual ballots
- Provide remote e-polling for committees

NB. The term committee in this document includes any group of elected representatives that may be set up according to the statutes of an elected assembly, e.g. commissions, or working parties.

The use cases treat the eRepresentative desktop as a 'black box', i.e. they do not refer to any internal architecture, except in the cases of e-voting and e-polling which have been provided as system use cases that accord with ScytI's background knowledge and e-voting architecture.

The actor-goal list, use case format and definitions below are adapted from Cockburn (2001).

	<i>Use case title</i>
Primary Actors	Categories of user or legacy system with behaviour in the use case, i.e. which the desktop must interact
Stakeholders and interests	Categories of people whose interests must be satisfied by the use case
Preconditions	Assertion about the state of the world necessary for the use case to start
Basic flow	Between 3 and 9 steps, each phrased as a goal that succeeds and stating the intent of the actor
Success/failure criteria	Assertions that can be checked to see that the use case has succeeded

Table 5.2 Use case format

5.2.1 Provide inter-assembly search and retrieval

<i>Primary actor</i>	<i>Goal</i>
Content user	Find and retrieve legislative documents that are relevant to the users' interests, from the collections of other elected assemblies (local/regional/ national).
	Select items to read from the legislative documents found.
	Read any one of the selected items, or request translation if it is written in an unfamiliar language
	Find translation requests that have been responded to.
	Respond to translation requests from other content users.
	Make available to selected colleagues the details of what was asked for, and the user's selection of items found.
Content administrator	Ensure content is relevant and up to date
	Monitor how effectively the users' requests for relevant documents have been met
	Monitor how effectively translation requests have been met.
System administrator	Maintain the integrity of data recorded about legislative documents

<i>Use case</i>	Provide inter-assembly search and retrieval
Primary Actors	Content user (elected representative, invited expert or interest group representative) Content administrator (e.g. information staff) System administrator
Stakeholders and interests	<i>Content user</i> - wants to find legislative documents that are related to legislative issue he/she is currently interested in, request help with translation when necessary and offer it when possible. <i>Content administrator</i> - wants to ensure content is relevant and up to date, monitor how effectively the users' requests for relevant documents have been met, and how effectively translation requests have been met. <i>System administrator</i> - wants to set global parameters for the selection of relevant assemblies and documents.
Preconditions	The scope of the document collection has been defined, in terms

	<p>of current legislative issues of interest to content users.</p> <p>The (other) assemblies whose documents are relevant have been identified, and those documents have been made available.</p> <p>Documents are described in a language understandable by content users in the assembly concerned.</p> <p>User groups are defined and details of them are available to content users.</p>
Basic flow	<ol style="list-style-type: none"> 1. The content administrator identifies and makes available a collection of relevant documents. 2. The content user finds translation requests that he/she made previously and have now been responded to, and chooses to read them. 3. The content user finds translation requests from other content users and chooses to offer a translation. 4. The content user chooses other elected assemblies (local/regional/ national) that may be relevant, specifies what he/she wants to look for, and selects those that appear relevant from their description. 5. The content user also chooses documents that colleagues in the same party group have considered relevant, and indicates which of those from his/her own selection to inform the same colleagues about. 6. The content user chooses to read any one of the selected items, and chooses to request a translation if it is written in an unfamiliar language. 7. The content administrator checks how effectively the users' requests for relevant documents have been met, and takes action to improve the document collection. 8. The content administrator checks the proportion of translation requests that have been met, and chooses to read a selection of those that have.

Success/failure criteria	<ul style="list-style-type: none"> a. A collection of documents meeting overall criteria for inclusion and representing legislative documents of two or more assemblies is 100% retrievable (100% recall) by the system administrator. b. Translation requests that a content user has responded to are identifiable by the content user who requested them. c. Documents that a content user has requested to be translated can be identified by other content users. d. Documents that meet the content user's relevance criteria are retrievable from the collections of assemblies that the content user expects to find them in. e. Documents that a content user has indicated should be made available to other content users from the same party group (or other identifiable user groups) can be identified by those content users. f. Legislative documents that a content user selects for reading can be read by the content user.. g. The content administrator can check the average number of documents retrieved by content users that they have identified as relevant. h. The content administrator can check how individual documents have been described in the document collection.
--------------------------	--

5.2.2 Track committee legislative actions

<i>Primary actor</i>	<i>Goal</i>
Content user	Find and retrieve legislative documents that are relevant to the users' interests, with details of the committee meetings that have debated them.
	For any committee meeting, get an overview of the legislative documents discussed, and a summary of each party group's position in relation to each.
	For any selected legislative document, find others that were submitted to the same committee meeting, or are related to each other through having similar descriptions.
	Select items to read from the legislative documents found.
	Read any one of the selected items.
	Make available to selected colleagues the details of what was asked for, and the user's selection of items found.

Content administrator	Keep committee members and interested others informed of committee proceedings, by providing a summary of each party group's position in relation to each legislative document discussed for each agenda item.
	Monitor how effectively content users can find relevant legislative documents.
System administrator	Ensure the document collection is maintained and meets the needs of the content administrator and content user

<i>Use case</i>	<i>Track committee legislative actions</i>
Primary Actors	Content user (elected representative, invited expert or interest group representative) Content administrator (e.g. information staff) System administrator
Stakeholders and interests	<i>Content user</i> - wants to find legislative documents that are related to a committee agenda item, or to a summary of committee members positions expressed during a committee meeting. <i>Content administrator</i> - wants to keep committee members and interested others informed of committee proceedings, and monitor how effectively the users' requests for relevant documents have been met. <i>System administrator</i> – wants to ensure the document collection is maintained and meets the needs of the content administrator and content user
Preconditions	The scope of the document collection has been defined, in terms of committee meetings and current legislative issues of interest to content users. Documents are described according to the meeting agendas in which they have been discussed. User groups are defined and details of them are available to content users.
Basic flow	<ol style="list-style-type: none"> 1. <i>Content administrator</i>, before a committee meeting, provides an agenda and for each item on it, a legislative document and any other relevant documents. 2. <i>Content administrator</i>, after a committee meeting, provides a summary of each party group's position expressed in the meeting, in relation to each legislative document discussed on the agenda. 3. <i>Content user</i> specifies what he/she wants to look for, and selects from the retrieved documents those that appear relevant from their description, or from details of the

	<p>committee meeting(s) they correspond to.</p> <ol style="list-style-type: none"> 4. <i>Content user</i> also may choose documents that colleagues in the same party group have considered relevant, and indicates which of those from his/her own selection to inform the same colleagues about. 5. <i>Content user</i> chooses to read any of the selected items. 6. <i>Content administrator</i> checks how effectively the users' requests for relevant documents have been met, and takes action to improve the document collection.
Success/failure criteria	<ol style="list-style-type: none"> a. A collection of documents meeting overall criteria for inclusion and representing legislative documents and other related documents is 100% retrievable (100% recall) by the system administrator. b. Documents that meet the content user's relevance criteria are retrievable. c. Documents that a content user has indicated should be made available to other content users from the same party group (or other identifiable user groups) can be identified by those content users. d. Legislative documents that a content user selects for reading can be read by the content user. e. The content administrator can check the average number of documents retrieved by content users that they have identified as relevant. f. The content administrator can check how individual documents have been described in the document collection.

5.2.3 Provide committee events notification

<i>Primary actor</i>	<i>Goal</i>
Content user	Request to be notified by one or more methods, when new or changed details are available about committee events, the topics of legislative proposals discussed in them, or the actions taken (e.g. comments made) by particular party groups or individuals.
Content administrator	For a given committee, identify the kinds of event that it is feasible to keep regularly updated details of.
System administrator	For the assembly as a whole, define the scope of a notification service by identifying the kinds of event that automatic notification is feasible for, and the trigger for each kind of notification.
	For the assembly as a whole, identify the notification methods that it is feasible to provide to content users.

<i>Use case</i>	<i>Provide committee events notification</i>
Primary Actors	Content user (elected representative, invited expert or interest group representative) Content administrator (e.g. information staff) System administrator
Stakeholders and interests	<i>Content user</i> - wants to be informed about committee events or changes to related information of interest. <i>Content administrator</i> - wants to ensure the definitions of events and committees are up to date <i>System administrator</i> – wants to ensure the definitions of events and notification mechanisms meet the needs of the content administrator and content user
Preconditions	The scope of the notification events has been defined, in terms of committee meetings and current legislative issues of interest to content users. Changes to committee agendas and other information defined as event triggers can be detected. User groups are defined and details of them are available to content users. Notifications can be recorded in the personal agendas of content users
Basic flow	<ol style="list-style-type: none"> 1. The system administrator defines, for the assembly as a whole, the scope of the notification service by identifying the kinds of event that automatic notification is feasible for (e.g. specific committees to be included), the notification methods available (e.g. SMS, email) and the possible triggers that maybe used (e.g. new document, changed document, new comment). 2. The content administrator may change the range of events to be notified for any committee he/she is responsible for. 3. The content user selects a committee and or legislative topic on which to receive notifications about, and one or more methods to receive notifications (e.g. email, SMS). 4. The content user selects, in relation to a selected committee or topic, one or more kinds of action to trigger a notification, including the addition of new documents, change in documents, or comments by particular user groups (e.g. party groups) or individuals.
Success/failure criteria	The content user receives notification of events that match the criteria he/she has specified, by the specified method.

5.2.4 Provide a secure discussion space

<i>Primary actor</i>	<i>Goal</i>
Content user	Find out discussions that are currently open in relation to a given committee, and for each find out the agenda, i.e. issue and/or proposals under discussion and its intended participants.
	Provide the authentication needed to access and contribute to the discussion
	Get an overview of party group positions, in relation to each discussion issue/proposal
	Get an overview of recent contributions, according to the users identity and access rights
	Read any contribution to which access is permitted
	Contribute a comment, and define who may access it
Content administrator	Define or edit a committee event for online discussion, and its agenda, i.e. an issue and/or one or more proposals for discussion
	Define or edit the duration of the online discussion, who may contribute, and who may read comments
	Define or edit one or more items of background material for each discussion issue an/or for each proposal
	Define or edit an opening position statement (post) for each party group represented in the committee, in relation to each discussion issue/proposal
	Define or edit the default access privileges and security parameters for pre-defined user groups, according to committee working practices
Discussion moderator	Get an overview of comments not previously moderated
	Moderate a comment and take appropriate action, e.g. to hide a comment from view if it breaches the stated conditions of use
	Record an evaluation of the comment, e.g. of its relevance or topicality
	Extract a report of all comments made in relation to each opening position statement
System administrator	Define or edit the default access privileges and security parameters for pre-defined user groups, according to assembly rules
	Edit conditions of use and privacy statements

<i>Use case</i>	<i>Provide secure discussion space</i>
Primary Actors	Content user (elected representative, invited expert or interest group representative) Content administrator (e.g. committee clerk, secretariat staf) Discussion moderator (e.g. committee chair) System administrator
Stakeholders and interests	Content user- wants to find discussions open to him/her, get an overview, read background information and choose to contribute Content administrator- wants to set up the discussion and provide the appropriate materials Discussion moderator – wants to ensure the discussion is set up according to committee practices, has useful results, and conforms to predefined conditions of use System administrator- wants to set global parameters for the assembly's online discussions
Preconditions	Committee schedule data is available The intended discussion participants correspond to pre-onfigured user groups A mechanism for authenticating user groups is available Background material is retrievable from online repositories
Basic flow	<ol style="list-style-type: none"> 1. The <i>content administrator</i> selects the most recent committee meeting from the schedule and chooses from <i>Track committee legislative actions</i> one of the discussion items, (e.g.) a legislative proposal, to set as the online agenda, using the positions adopted by each party group in the meeting to define the opening contributions. 2. The <i>content administrator</i> agrees to open discussion from (e.g.) tomorrow until (e.g.) the day before the next meeting is scheduled, and identifies the intended participants; individuals or groups to be invited to access and contribute to it, agreeing to make the committee chair the moderator. The discussion will automatically close on the scheduled day, unless the content administrator indicates otherwise. Then the content administrator will have the option to make available a summary of the discussion, which will be otherwise closed. 3. The <i>content administrator</i> agrees to make the legislative proposal available as background material for the discussion, then uses <i>Provide inter-assembly search and retrieval</i> to find other material and chooses a few of the results to add to the

	<p>background material.</p> <ol style="list-style-type: none"> 4. The <i>content user</i> receives an invitation to join the discussion, chooses it from others that match his/her interests, and gives the details needed to participate. 5. The <i>content user</i> sees a summary of the positions of each party group that were expressed at the last meeting, and reads some comments that have been contributed in response to it. 6. The <i>content user</i> chooses a position statement and decides to add a response to those made already. 7. The <i>content user</i> chooses to address the comment to interested members of his/her party, as well as the invited participants. 8. The <i>discussion moderator</i> reads a summary of the comments not previously moderated, chooses (e.g.) the first to read and decides that the comment breaches the stated conditions of use, and should no longer be published 9. The <i>discussion moderator</i> makes a note that the comment was (e.g.) irrelevant to the discussion topic, and decides to make a report of all comments made in relation to the corresponding position statement, by members of the same party group as the commenter belongs to.
Success/failure criteria	<ol style="list-style-type: none"> a. Content users matching the intended participants for the discussion can gain access to it, and others that match their interests and access rights. b. Content users and the content administrator can access the background material the content administrator has selected . c. The intended content users are notified that the discussion has opened and are invited to contribute. d. A content user can address a comment to one or more user groups, within those that the content administrator has defined as participants, and other interested members of his/her party group. e. The discussion moderator is notified that a number of comments remain unchecked since the previous day. f. The discussion moderator can identify which comments should and should not be published.

5.2.5 Provide e-voting support for individual ballots

<i>Primary actor</i>	<i>Goal</i>
Content Administrator	Prepare Voting Process
	Prepare Voting Process Data
Voting Process Chair	Manage Voting Process
	Prepare Voting Data
	Register Voters
	Validate Voting Process
	Open Voting Process
	Close Voting Process
	Consolidate Ballots
	Tally Ballots
	Publish Voting Results
	Publish Voting Statistics
	Publish Voting Receipts
Content User	Participate in an Voting Process
	Cast Ballot
	Consult Voting Results
	Consult Voting Statistics
	Validate Voting Receipts
Any actor	Login

<i>Use case</i>	<i>Provide e-voting support for individual ballots</i>
Primary Actors	eRepresentative Content Management Service (CMS) eRepresentative Directory Content Administrator (Content User, Assembly Clerk...) Voting Process Chair Content User
Stakeholders and interests	<i>eRepresentative CMS</i> – wants to provide Voting Process configuration parameters.

	<p><i>eRepresentative Directory</i> – wants to provide Content User credentials.</p> <p><i>Chamber Voting Platform</i> – wants to provide the participation and Voting Results of the in-person Chamber Voting Process.</p> <p><i>Content Administrator</i> – wants to prepare Voting Processes.</p> <p><i>Voting Process Chair</i> – wants to manage Voting Processes.</p> <p><i>Content User</i> – wants to participate in a Voting Process</p>
Preconditions	None
Basic flow	<ol style="list-style-type: none"> 1. The Content Administrator prepares a Voting Process using the plenary session agenda stored in the eRepresentative CMS and the Content User credentials stored in the eRepresentative Directory. Note that the Voting Process may have additional configuration requirements that may be included manually by the Content Administrator. 2. When Voting Process is prepared, the Voting Process Chair manages Voting Processes (e.g., opening and/or closing the voting process) in which a Content User participates using his/her eRepresentative Directory credentials.
Success/failure criteria	<ol style="list-style-type: none"> a. The eRepresentative CMS has provided Voting Process configuration parameters (e.g., plenary session agenda), b. the eRepresentative Directory has provided Content User credentials, c. the Content Administrator has successfully prepared an Voting Process, d. the Voting Process Chair has successfully managed an Voting Process e. the Content User successfully participated with an Voting Process.

5.2.6 Provide remote e-polling for committees

<i>Primary actor</i>	<i>Goal</i>
Content Administrator	Prepare Polling Process
	Prepare Polling Process Data
	Register Poll Participants
	Manage Polling Process
	Validate Polling Process
	Open Polling Process
	Close Polling Process
	Tally Responses
	Publish Polling Results
	Publish Polling Statistics
	Publish Polling Receipts
Content User	Participate in a Polling Process
	Send Response
	Consult Polling Results
	Consult Polling Statistics
	Validate Polling Receipts
Any actor	Login

<i>Use case</i>	<i>Provide remote e-polling for committees</i>
Primary Actors	eRepresentative CMS eRepresentative Directory Content Administrator (Content User, Assembly Clerk...) Content User
Stakeholders and interests	<i>eRepresentative Directory</i> – wants to provide Content User credentials. <i>Content Administrator</i> – wants to prepare and manage a Polling Processes. <i>Content User</i> – wants to participate in a Polling Process
Preconditions	Assertion about the state of the world necessary for the

	use case to start
Basic flow	<ol style="list-style-type: none"> 1. The Content Administrator prepares a Polling Process introducing the questions of the poll and the registering the Content User credentials of the participants gathered from the eRepresentative Directory. 2. When a Polling Process is prepared, the Content Administrator manages Polling Processes (e.g., opening and/or closing the Polling process) in which registered Content User participates using his/her eRepresentative Directory credentials.
Success/failure criteria	<ol style="list-style-type: none"> a. The Content Administrator has provided Polling Process configuration parameters (e.g., polling questions) and has registered the Content User participants of the Polling Process, b. the eRepresentative Directory has provided Content User credentials, c. the Content Administrator has successfully prepared an Polling Process, d. the Content Administrator has successfully managed an Polling Process e. he Content User successfully participated with an Polling Process.

6 Non-Functional Requirements

NB. The term 'eRep desktop' in this section means the eRepresentative platform in its entirety, i.e. including all open source software that project partners integrate with application components developed in the project, and all software contractually defined as partners' background intellectual property. .

The requirements statements are numbered for ease of reference.

6.1 Look and Feel Requirements

- R- 1. The eRep desktop shall be capable of displaying content consistently with the styles used by participating assemblies to display content intended for use by their elected members.

6.2 Usability and Accessibility Requirements

- R- 2. At least 70% of users in test sessions shall be able to complete a test scenario and resolve any difficulties encountered without assistance.
- R- 3. Users with basic internet experience (6 months to one year) shall on average give satisfactory, or higher, ratings on an 'ease of use' scale to be given in a questionnaire
- R- 4. Application text visible to end-users shall be made available in the national language of the pilot site.
- R- 5. The eRep desktop shall comply with Web Accessibility Initiative (WAI) Guidelines for the Accessibility of Web Content level 2 checkpoints as defined at <http://www.w3.org/TR/WAI-WEBCONTENT/> Exceptions to this requirement may be agreed with the participating assembly partners.

6.3 Performance Requirements

6.3.1 Response time

- R- 6. Users in test sessions shall not have to wait more than 10 seconds on average for a page to load over a 56kbps modem connection

6.3.2 Reliability and Availability

- R- 7. The eRepresentative desktop shall be available to authorised content users on internet/extranet connections for use 24 hours per day during the pilot period agreed in advance with each assembly.
- R- 8. The eRepresentative desktop shall provide authorised content users with a local cache of the document collection (or parts of relevant to the content users preferences) on request.

6.3.3 Document capacity

- R- 9. The eRepresentative desktop shall be capable of enabling search and retrieval of legislative documents (proposed laws and amendments)

covering a period of 4 years, for each of 5 elected assemblies. Based on available figures this is roughly estimated to be in the order of 50-100 for each local assembly, and 500-5000 for each national and regional assemblies. Therefore for pilot purposes approximately 10,000 documents of 20 pages should be provided for.

6.4 Operational Requirements

6.4.1 Expected physical environment

Given the need for a subset of the eRepresentative functionality to be accessible in environments where internet connectivity may be unreliable, the eRepresentative desktop must take measures to avoid user sessions being timed out too quickly.

6.4.2 Expected technological environment

Requirements regarding the technological environment expected for eRepresentative services will be detailed in D3.1

6.5 Security Requirements

6.5.1 Audit

- R- 10. *Authentication transaction fails shall be logged:* Any authentication attempt and its results (acceptance or rejection) shall be logged
- R- 11. *Authorization transactions shall be registered:* Any authorization attempt to access to a service or document and its result (acceptance or rejection) shall be registered
- R- 12. *Communication transactions shall be logged:* Any information exchange and their participants must be logged.
- R- 13. *Time and date of information creation and/or modification must be logged:* Time and date of each visit to a web page, download of a document, and generation or modification of any information and the individual that performed the action must be registered.
- R- 14. *Information access must be logged:* For each visit to eRep desktop content (i.e. a request to view one or pages from the same IP address), the time and date, visit duration and page or document title must be logged. However the IP address and user authentication data must not be stored with such data.
- R- 15. *Information logged shall fulfil the privacy requirements:* Any registered information stored in the log files must fulfil the privacy requirements described in this section. This requirement is subject to each assembly's privacy policies.

6.5.2 Authentication

- R- 16. *The authentication method shall identify individuals in an univocal and non-questionable manner.* The authentication method shall verify the identity claimed by an individual without collision risks.
- R- 17. *The eRep desktop shall support public access.* The eRep desktop must support unauthenticated access to specific information. This access must be only restricted to the information specified as public.
- R- 18. *The eRep desktop shall support service authentication:* The eRep desktop shall support the access from external services (e.g., other eRepresentative assemblies' platforms) without requiring the participation of an authenticated individual.
- R- 19. *The authentication method shall be the same for all the supported devices*
- R- 20. *E-voting and e-polling authentication shall provide strong authentication:* The authentication method for e-voting and e-polling must be based on strong authentication methods.

6.5.3 Authorization

- R- 21. *Authorization method shall be based on individuals and/or groups:* the authorization shall support the definition of access control rules based on individual identities and group affiliations.
- R- 22. *Authorization shall provide a registration system:* the authorization system must provide a registration system for receiving enrolment applications from individuals.
- R- 23. *Multiple authorization fails must block the account access to the service:* The system must monitor multiple authorization fails and reacts blocking the account and notifying this action to the service administrator.

6.5.4 Privacy

- R- 24. *The privacy of the information transmitted across a communication network shall be preserved.* No user shall be allowed to or capable of attaching to another user's session. The services shall be accessed from the eRep desktop device using encrypted channels (e.g., SSL).
- R- 25. *The eRep desktop shall support private communication among individuals and groups:* Individuals shall be able to decide if the information they sent should be available as public or only can be accessed by an individual or group.
- R- 26. *e-Voting shall preserve the privacy of the votes:* It must not be possible to correlate votes with voters.
- R- 27. *e-Voting shall prevent multiple voting.* eRepresentative must provide a choice for representatives to vote either in person (using the currently available chamber voting system) or remotely (using the eRepresentative voting system) in any ballot according to their choice (or that of the voting administrator). Therefore, the eRepresentative voting system must provide to the in person voting system a means for verifying if a representative has cast a remote vote and, if necessary, for spoiling this vote. This feature is

needed for guaranteeing that only one representative vote will be included in the final count. The spoiling action shall not destroy the remote vote, that shall be kept in the remote system (marked with a spoil tag) for auditing purposes and solving any dispute.

- R- 28. *Personal information shall be kept private:* Any personal information needed for the authentication, authorization or any other eRep desktop management tasks shall be kept as secret.
- R- 29. *Personal data gathering shall provide a privacy statement:* Any process that requires the gathering of personal information shall show a privacy statement message, making it clear how such data will be used and why it is being requested.
- R- 30. *Access to any offline information kept on a device shall be privacy protected:* If any eRep desktop service or function allows offline information to be kept in a device, access to this information must be restricted.

6.5.5 Integrity

- R- 31. *The integrity of the stored information must be preserved:* The eRep desktop must prevent any unauthorized individual from altering any of the contents of the information stored.
- R- 32. *Periodical integrity checks shall be supported:* The eRep desktop must support the implementation of periodical integrity checks of the stored information.
- R- 33. *The integrity of the logged information must be preserved:* The integrity of the log files and their contents must be preserved.

6.5.6 Non-repudiation

- R- 34. *The eRep desktop shall support the use of digital signatures:* The eRep desktop shall support the use of digitally signed documents, including the check of the authenticity of these documents (i.e. digital signature validation).
- R- 35. *The eRep desktop shall support the use of time stamping services:* The platform shall support the time stamping of documents by means of an external time stamp server.

6.6 Cultural and Legal Requirements

6.6.1 Cultural requirements

- R- 36. *The eRep desktop must provide multilingual support:* the user should be able to select alternate language(s) according to the availability of translated versions of the content provided.

6.6.2 Legal requirements

- R- 37. *Compliance with assembly statutes:* the eRep desktop must comply with all statutes governing the use of electronic communications, privacy, and

confidentiality unless exceptions are expressly agreed by the assembly partners' representatives in the project.

7 References

EPRI (2005) *Parliamentarians & ICTs: Awareness, understanding and activity levels of European Parliamentarians* EPRI Knowledge IST for Parliamentarians Nr. 511694; Brussels, European Parliamentary Research Initiative.

Catalonian Parliament (2006) 'The Parliament', available at: [http://www.parlament-cat.net](http://www.parlament.cat.net) (April 2006)

Checkland and Scholes (1999) *Soft Systems Methodology in Action* (2nd edition) Chichester: Wiley

Cockburn, A. (2001) *Writing Effective Use Cases* London: Addison Wesley

Dutch Parliament (2006) 'Rules of Procedure in the Tweede Kamer', available at: <http://www.houseofrepresentatives.nl/procedures/index.jsp> (April 2006)

Hansard Society (2006) 'TellParliament.net Interim Evaluation Report' available at: <http://www.hansardsociety.org.uk/programmes/e-democracy/tellparliament>

Heeks, R. (2006) 'Implementing and Managing eGovernment' London: Sage Publications

Hungarian National Assembly (2006) 'General Information on the Hungarian National Assembly', available at: www.parlament.hu/parl_en.htm (April 2006)

Lithuanian Parliament (2006) 'Statute of the Seimas of the Republic of Lithuania' http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc_e?p_id=259310 (April 2006)

van Laer, C.J.P. (1999) 'The impact of the internet on legal bibliography' in: Hondius, E. (ed.) *Netherlands Reports to the Fifteenth Annual Congress on Comparative Law, Bristol, 1998* Oxford: Hart Publishing

Oostveen, A and van den Besselaar, P. (2005) 'User involvement in large-scale e-Government projects: Finding an effective combination of strategies and methods' *Proceedings of INTERACT 05-Workshop: User Involvement in e-Government development projects*, Rome, Italy. September 12, 2005

Whyte, A. and Macintosh, A. (2002); 'Analysis and Evaluation of e-Consultations'; *e-Service Journal*; 2(1), 2002; pp.9-34

8 Annex: Requirements Gathering Instruments

8.1 Initial Questionnaire

Questionnaire on Managing Legislative Information

Aims of the questionnaire

The questionnaire is intended to help us define for each of the assemblies involved in eRepresentative: -

- current practice in managing legislative information
- relevant characteristics of representatives and other stakeholders
- requirements and benefits that eRepresentative should realise

The results are required for Wp2 and will also be relevant to Wp1 and Wp3 (questions on security have been added by ScytI). Some questions may look like they repeat some already asked for Wp1 by Gov2U. Please do not duplicate your answers to those questions- if you have nothing further to add to them, just state that answers already have been provided.

What to do and next steps for Wp2

Please gather the information you need and send responses by: *10 March*. We will use your responses to provide you (eRepresentative project members) with further questions *for you to ask your user panel*. We anticipate sending these questions by *17 March* and to get responses by *10 April*.

Note that:

- (a) We do *not* expect you to seek answers from representatives at this stage. However your responses to the questionnaire may help you to consider who should be on your user panel.
- (b) Sections of our deliverables that include your responses can be confidential (restricted to consortium partners) if you require.

Who should be on the 'user panel'

Please aim to get the involvement of 3- 5 elected representatives in your assembly, and 2-4 people in other stakeholder categories (e.g. mp's assistants and legal/procedural experts), i.e. 5-9 people in total, not counting yourself or others in your IT team already involved.

As far as possible, there should be: -

- at least one representative who is *an experienced internet user*, and at least one who is *not experienced*
- at least two representatives who are willing to *champion* the project to colleagues and at least one who is *sceptical* about its success
- at least *two political parties* represented, to avoid any perceived bias

Q1. Considering the phases of the legislative process that you have identified for wp1, what are the *main activities* you think can be improved most in this project?

Below are some activities eRepresentative may support. Please indicate below to indicate to what extent these are activities that are (a) currently supported by some online tools, and (b) are important for eRepresentative to support.

If you prefer that we focus on other activities or have other comments please use the space below. Please note your responses here are only to help focus our work - this is not a definitive list, and nor is it meant to comprehensively describe your legislative processes.

Current situation: ✓ = some current use of online tools, ✗ = all on paper

Importance: 1= interesting but not important; 2= quite important; 3= very important to users/stakeholders and to success of eRepresentative. ?=cannot say yet

	1-3	✓ ✗
(f) Find information relevant to legislative action, by searching/browsing and retrieving:-		
i. Internal archives of committee proceedings, background papers, other official publications; structured lists of these, e.g. bibliographic databases, shared bookmarks, metadata		
ii. External websites, including subscription services		
iii. Direct communications between representatives and citizens/interest groups (email, fax, voice), records of prior contacts or presentations/ documents submitted by them to representatives.		
iv. Indirect communication between representatives and citizens/interest groups, i.e. results from consultation forums, surveys, focus groups etc.		
(g) Manage information from the above sources; i.e. categorise documents/messages, categorise individuals groups to communicate with; edit categories (metadata); relate items to each other.		
(h) Manage legislative document (proposal, amendment, conclusions) i.e. create the document, submit document to official secretariat, get notification of status, edit categories (metadata); relate items to each other.		

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

	1-5	✓ ✕
<u>(i)</u> <i>Gather comments on legislative document</i> , i.e. make documents available to identified group categories (e.g. parliamentary groups, committee colleagues, broadcast tv, press, spokespeople for citizen groups or lobby groups); store/retrieve comments received; analyse comments to ascertain general preferences.		
<u>(j)</u> <i>Conduct poll/vote</i> on alternatives, i.e. define closed list of choices, define mechanism for choosing between them, make choices/ votes, store and retrieve choices, analyse choices made to ascertain general preferences.		
<u>(k)</u> <i>Gather signatures</i> i.e. provide a means for individuals or groups to add their name to indicate support for proposals, authenticate identities, store/retrieve these names.		
<u>(l)</u> <i>Publicise decisions</i> , i.e. Make documentary evidence of committee decisions available to identified groups in the assembly, and externally.		
<i>Other activities or comments on the above</i>		

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Q2. What is the ‘added value’ of these activities?

I.e. considering the activities that you have indicated eRepresentative should focus on, what factors do you think representatives/ other stakeholders currently see as *important when judging success or failure?*

Importance: 1= interesting but not important; 2= quite important; 3= very important to users/stakeholders; ?=cannot say yet ----->



10. Effective use of time in committee meetings	
11. Convenient access to views of colleagues, experts, others involved in the issue debated	
12. Convenient access to information	
13. Security of communications with people or information	
14. Traceability/ transparency of legislative actions	
15. Range of relevant information and media types available	
16. Timeliness of information available	
17. Usability of information systems	
18. Costs / efficiency of information provision	
<i>Others?</i>	

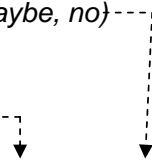
Your responses here will help us in later discussion of eRepresentative requirements and acceptance criteria.

Q.3. What *projects are underway* that you consider directly related to eRepresentative?

Please summarise any ongoing projects that may affect eRepresentative (a paragraph mentioning the aspects you consider relevant) and indicate:-

Will eRepresentative depend on the other project's results? (yes, maybe, no)-----

Will the other project's results depend on eRepresentative? (yes, maybe, no)-----



Any further information on these projects that you have available in English would be appreciated!

Q.4 What are the relevant *characteristics of elected representatives?*

Please indicate which of the following data you have available on the representatives:-

- ✓ Available
- ? Need to make enquiries
- ✗ Unavailable



(a) Age?	
(b) Gender?	
(c) Attitudes to information & communications technology?	
(d) Level of confidence or familiarity with internet/ assembly intranet?	

Please provide any statistics that are available. If you need to make enquiries please let us know when you can confirm the availability.

Q. 5 What should we *take as given in defining requirements for eRepresentative?*

I.e. What key factors do you think we should be aware of in defining the eRepresentative system requirements - *apart from* what representatives want or need?

Please briefly mention below any digital signature legislation, digital ID legislation, policies on electronic voting, personal data protection legislation, security policies for electoral assemblies, changes to the legislative process, party political issues, language issues, cultural issues that may be relevant.

We need at least the following information. *If the relevant laws, regulations, policies or detailed descriptions of them are available in English please also provide them.*

(a) Changes to the legislative process?

Are any expected? E.g. Do you know of any political pressure for changes, that might follow any elections taking place in the next two years?

Yes No Possibly (not sure)

Any comments-

(b) Party political issues

Do you expect any party political issues to affect representatives attitude to using technology in the legislative process? E.g. might MPs from one party find it more useful than others, if there are differences in the kinds of stakeholder that parties communicate with and their access to technology?

Yes No Possibly (not sure)

Any comments-

(c) Language issues

Do you expect any requirement to support multiple languages? E.g. Is the parliament required to make information available in multiple languages?

Yes No Possibly (not sure)

Any comments-

(d) Cultural issues

e.g. Are there traditional views on how political decisions made that might lead to big differences between your legislative model (how things should work) and practice (how things are actually done)?

Yes No Possibly (not sure)

Any comments-

(e) Digital signatures

Please state:-

- Requirements of the digital certificates:
 - Types of digital certificates and their scope of use
 - Key lengths
 - Format of the certificate contents: distinguished name, extensions, etc.
 - Certification Authority that can issue these certificates
 - Validation services for the digital certificates: CRLs, OCSP...
- Requirements for digitally signing:
 - Format of the digital signature: PKCS#7, CMS...
 - Contents of the digital signature: time, data, etc...
 - Approved hardware devices: smartcards, readers, etc.

(f) Digital ID

Please state:-

- Certificates supported
- Format of the digital ID: PKCS#15, etc.
- Hardware description: smartcard and reader
- Available tools: APIs, etc.

(g) Policies on electronic voting

- Are you using any kind of electronic voting system for the elected assembly?

Yes No

If 'yes' please briefly describe

- Are there plans to implement electronic voting *for the elected assembly?*

Yes No

And plans to implement *remote* electronic voting?

Yes No

If 'yes' to either of the above please briefly describe

- Do you have any legislation on electronic voting (remote or not)?

Yes No

If 'yes' please briefly describe

(h) Personal data protection

Please briefly describe the relevant policies of your assembly.

(i) Security policies

- Is there any legislation to regulate the implementation and use of cryptographic tools/devices on the public sector?

Yes No

If 'yes' please briefly describe

- Is there any security standard certification that must be granted for the elected assemblies IT infrastructure? (e.g., ISO17799/BS7799)

Yes No

If 'yes' please briefly describe

Q6. Who is involved in providing representatives with legislative information, and the tools to manage it?

In question 1 you indicated which ‘legislative information’ activities you expect eRepresentative to help manage. For *those activities* please tell us:-

- Who has day-to-day responsibility for managing the activities concerned?

Please give the roles involved and indicate whether it is a staff or elected representative role e.g. “secretary of the legal affairs committee (representative)”

- Who else is involved or affected, i.e. stakeholders?

Please give roles or categories of people

- Which of these do you expect to become end-users of eRepresentative?

Please give roles or categories of people you expect to be end-users, assuming that the eRepresentative product supports the activity concerned and is deployed at the end of the project.

5. Find information relevant to legislative action, by searching/browsing and retrieving from internal and external sources.

Day to day management:

Stakeholders:

Expected end-users:

Formatted: Bullets and Numbering

6. Manage information from the above sources; i.e. categorise documents/messages, categorise individuals groups to communicate with; edit categories (metadata); relate items to each other.

Day to day management:

Stakeholders:

Expected end-users:

Formatted: Bullets and Numbering

7. Manage legislative document (proposal, amendment, conclusions) i.e. create the document, submit document to official secretariat, get notification of status, edit categories (metadata); relate items to each other.

Day to day management:

Stakeholders:

Formatted: Bullets and Numbering

Expected end-users:

8. *Gather comments on legislative document*, i.e. make documents available to identified group categories (e.g. parliamentary groups, committee colleagues, broadcast tv, press, spokespeople for citizen groups or lobby groups); store/retrieve comments received; analyse comments to ascertain general preferences.

Day to day management:

Stakeholders:

Expected end-users:

Formatted: Bullets and Numbering

Conduct poll/vote on alternatives, i.e. define closed list of choices, define mechanism for choosing between them, make choices/ votes, store and retrieve choices, analyse choices made to ascertain general preferences.

Day to day management:

Stakeholders:

Expected end-users:

Gather signatures i.e. provide a means for individuals or groups to add their name to indicate support for proposals, authenticate identities, store/retrieve these names.

Day to day management:

Stakeholders:

Expected end-users:

Publicise decisions, i.e. Make documentary evidence of committee decisions available to identified groups in the assembly, and externally.

Day to day management:

Stakeholders:

Expected end-users:

Q.7 Where do representatives meet?

(a) Are committee meetings always in the same rooms, the same parliament/council buildings?

Yes No

If 'no' what other locations are used?

(b) Where do representatives meet informally to prepare for committee meetings (e.g. reading room, café/bar)?

Please describe what kinds of places, and whether or not inside the official assembly buildings

(c) Where else do representatives work alone on committee papers, or consult published information sources?

E.g. at home, constituency office, while travelling on the train etc.

4) Where else do representatives work on committee papers *with other stakeholders*: including parliamentary staff, political group staff, and spokespeople for interest groups?

Please describe what kinds of places, and whether or not inside the official assembly buildings

Q.8 How are conventional media used in communications between representatives and assembly staff

*i.e. **Apart from** official legislative documents you have described for wp1, please mention any bulletins, briefings or regular information broadcasts that the assembly provides for representatives*

For each please say how often they are distributed (daily, weekly, monthly, less often) and what media (e.g. paper, cctv, video)

Q9 How are digital media used “—“-“

Please describe your desktop applications in the following categories, the document formats supported (e.g., word, pdf, xml), and whether they are shared/synchronized among different desktop devices.

	Applications	formats	Shared across desktop devices? (if so which?)
(a) Author or publish documents, create presentation slides			
(b) Collaboratively edit & control document versions; manage workflow.			
(c) Create or manage digital recordings of committees, assembly sessions etc.			
(d) Analyse web traffic (please identify any analysis software & server log file format used).			

Q.10 How are digital media protected?

Please briefly describe what you have for each of the following.

(a) Access control policies and tools

- Tools: standard file system permissions access control, LDAP/Active Service/NDS access control, etc.
- Policies:
 - Local and remote access policies (e.g. users, Groups, Roles, etc.)
 - Database access policies

(b) Elected representative authentication methods (specify in which kind of desktop is supported)

- User/password
- Digital certificates
- One time passwords

(c) Privacy protection practices

- Disc encryption
- File encryption
- Key management (to avoid the lost of information)

(d) Integrity protection practices

- MAC
- Hash

(e) No repudiation practices

- Digital signatures of the document file
- Digital signature of the document contents

(f) Other security technologies or protocols

Q.11 How is your assembly's technical *infrastructure* used to support legislative activities?

(a) What mobile devices does the assembly provide to representatives, and which assembly services are available through each?

Please tick ✓ if provided to representatives (specifications can be provided later)

	<i>Provided?</i>	<i>Assembly services available?</i>					
		e-mail	agenda	contacts	web	instant messaging	document access
Laptop							
PDA							
Mobile phone							

(b) Which tools are standardized to access to this services? (e.g., Outlook, web portal, MS office tools, Blackberry tools, etc.)

(c) Do representatives also use their own mobile devices?

Yes No Possibly (not sure)

Any comments-

If 'yes', is it a policy that representatives *must* use their own mobile devices for personal (unofficial) business?

Yes No

Any comments-

(d) What network services are provided to representatives and other stakeholders, including through third-party contracts (e.g. WiFi, GSM....)

(e) What directory standards and services are used? (e.g. Novell, LDAP, X.500...)

Q.12 How do you currently *test software for acceptability* to your users?

Please briefly describe, and attach any details that you have available in English.

(a) Accessibility standards or policies (e.g. WAI priority level 2)

(b) Methods used to test accessibility (e.g. automated checks, user testing)

(c) Usability criteria normally used

(d) Methods used to test usability (e.g. heuristic tests, controlled tests, field tests)

Thank you! Please return the questionnaire to Napier University ITC a.whyte@napier.ac.uk

8.2 Responses to Initial In-Out of Scope List

No.	item	Ca	Du	Hu	Li	We
1	Search/browse and retrieve information from internal archives	In	In	In	In	In
2	Search/browse and retrieve information from external web sites.	In	In	In	In	In
3	Manage contacts, i.e. for staff and rep's to manage contacts (messages and related files) with each other, and with other stakeholders in legislative process.	In	In	In	Out	In
4	Manage information relevant to legislation; i.e. categorise online documents /messages, relate items to each other.	In	In	In	Out	In
5	Manage legislative document (proposal, amendment, conclusions) i.e. view/edit current status including document creation, submission, and approval; edit other metadata; relate items to each other.	In	In	In	Out	In
6	Gather comments on legislative document, in collaboration with identified groups of representatives, assembly staff, or spokespeople.	In	In	In	In	In
7	Gather comments from the general public on draft policy proposals or legislation.	In	Out	In	In	In
8	Gather signatures i.e. provide a means for individuals or groups to add their name to indicate support for proposals, authenticate identities, store/retrieve these names.	Don't know	Out	Out	Out	Don't know
9	eVote (remotely) on alternatives, i.e. define a closed list of choices, define a mechanism for choosing between them, make choices/ votes, store and retrieve choices, analyse choices made to ascertain general preferences.	Don't know	In	Out	Out	Don't know
10	Publicise decisions, i.e. Make evidence of committee decisions available to identified groups in the assembly, and externally.	In	In	In	Out	In
11	Audio and video – recordings of speeches or meetings.	Out	In	Out	Out	Out

Comments received

gathering comments on legislative documents (👤 Angus Whyte, NAPIER, 30 Mar 06 15:49)
 In principle it seems wrong to exclude the general public from comments on legislative documents. However in my view we should do that. There are software solutions for online consultation available off-the-shelf. Moreover it would be too high a risk for the pilot because it involves so many

difficult issues such as the timing, the duration, how to manage moderation of the discussion and give feedback on policy outcomes, and how to publicise it.

My first opinion (👤 Beyer, Peter, TSG EMEA CI GWE Loc, 31 Mar 06 09:37)

My first view, but it still can change. - Audio Video definitely not in.

Clarifications to my responses (👤 Jordi Puiggali, Scytl, 3 Apr 06 20:07)

Question 6 (Gather comments on legislative document) has two different implementations: comments can be gathered from the legacy backend or can be introduced using the eRepresentative desktop. The later case requires the provision of editing features to the eRepresentative desktop that must be further discussed. The same rationale applies for question 8 (Gather signatures). Finally, regarding question 11, I think that audio/video can be implemented in a static way (e.g., podcast or MPEG files) if it is gathered from the legacy backend or external sources. By other way, I think that Audio/video broadcasting (live speeches) or the introduction of audio/video files using the eRepresentative desktop is out of the scope of the current version of eRepresentative.

Clarifications (👤 Birutė Leonaviėienė , Lithuanian Parliament, 4 Apr 06 14:13)

Q9. eVote out of scope, because voting takes place only in the plenary sitting hall (due the Statute of the Seimas).

Q3. Manage contacts out of scope - we are creating our own subsystem.

Q5, Q10, Q11. We have own subsystems.

Clarifications (👤 Gemma Menéndez, Catalanian Parliament, 7 Apr 06 12:43)

From our point of view, points like the Q1,Q3 or Q5, should be included in the eRep scope, but it is necessary to decide like:

- with new developments which provide better functionality that those of the specific systems to each assambly or...
- with the integration with these.

About Q9: we actually are in the same case that Lithuanian, but it could be interesting to evaluate other types of polls or special circumstances of vote (illness, motherhood, etc...)

Assembly member interview topics

General topics for discussion with MPs/ Councillors, MPs' assistants, committee clerks or procedural experts.

1. *Your experience with ICT, and your parliamentary/ council work*
2. *How you and colleagues currently use the intranet in the legislative procedure, and where else it would be useful to access it.*
3. *What eRepresentative should do, and what qualities it should have.*
4. *What groups of people or organisations you need to share draft legislative documents with securely.*
5. *What criteria you would use to assess whether eRepresentative makes your work easier.*

Specific questions follow below. Questions from MPs/ Councillors are also welcome.

1. *Your experience with ICT in your parliamentary (or council) work*
 - 1.1 Did you gain ICT experience before becoming a parliamentary representative, or since then?
 - 1.2 Is there any intranet training provided? If so from who?
 - 1.3 From where is there most pressure to use ICT in your work? – Constituents? Your party? Government? Parliamentary staff?
2. *How you and colleagues currently use the intranet in the legislative procedure, and where else it would be useful to access it.*
 - 2.1 In your experience, how do your colleagues mostly use the intranet in their committee work? And what about external websites or services?
 - 2.2 eRepresentative should enable you to access relevant information and work with colleagues remotely using mobile technologies. *What kinds of places* would you expect to do that work in? (e.g. home office, constituency office, on the move)?
 - 2.3 Where would you expect to read documents online rather than refer to printed copies?
 - 2.4 How would security constraints affect where you work? E.g. are there any *categories of information* that would be inappropriate to work with on mobile phones or PDA's in a public place?
 - 2.5. When in the legislative procedure do you need to be in the *same place and time* as your committee colleagues or parliamentary staff? Why?

3. *What eRepresentative should do, and what qualities it should have to help you find out what you need to know, when you need to know it*

Considering what is currently available to help you on the intranet, please each consider 1 or 2 of the activities (a) – (f) below, and tell us: -

3.1 *What should eRepresentative do to help? E.g. what categories of information would you want to be notified about? Are there any formats (audio, video etc.) you need but do not have yet?*

3.2 *What other qualities should it have (e.g. in terms of ease of use, performance, confidentiality)?*

- (a) *Find information* by searching/browsing and retrieving
 - i. parliamentary archives and information sources
 - ii. external websites
 - iii. contacts with individuals or groups (internal or external), and records associated with them.
- (b) *Manage information* from the above sources; i.e. categorise documents/messages, edit the categories (metadata);
- (c) *Manage legislative document (proposal, amendment, conclusions)* i.e. create the document, submit it to official secretariat, get notification of status, edit categories (metadata); relate items to each other.
- (d) *Gather comments on legislative document*; i.e. make document (bill, amendment etc) available to identified groups (e.g. party groups, committee colleagues, interest groups); see and respond to other comments.
- (e) *Vote on alternatives*, i.e. define closed list of choices, define mechanism for choosing between them, vote (make choices), store and retrieve choices, analyse choices made to ascertain general preferences.
- (f) *Publicise decisions*, i.e. Make documentary evidence of committee decisions available to identified groups in the assembly, and the public

4. *What groups of people or organisations do you need to share draft legislative documents with securely?*

4.1 '*Internally*': e.g. assistants, research or library/archive staff, secretariat, other committee members, party political offices, expert advisors, spokespeople for interest groups.

4.2 '*Externally*': other organisations- e.g. civic groups- or assemblies –e.g. upper/lower house, regional assemblies, municipalities, other countries.

5. *What criteria will you (or colleagues) use to assess whether eRepresentative makes your work easier?*

- To what extent are the following criteria important to encourage your colleagues to make more use of the intranet services?

Please identify any of the following that are *important* to you/ your colleagues, and any others we should include.

- (a) More effective use of time in committee meetings
- (b) More convenient access to views of colleagues, experts, others involved in the issue debated
- (c) More convenient access to information
- (d) Improved security of communications with people or information
- (e) Added traceability/ transparency of legislative actions
- (f) Wider range of relevant information and media types
- (g) Faster availability of information
- (h) Easier to use information systems
- (i) Improved cost efficiency of information provision