

Chapter #

Digital Democracy through Electronic Petitioning *e-petitioner*

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Abstract: The International Teledemocracy Centre at Napier University has designed an innovative e-democracy toolkit to support participation in the democratic decision-making process. Electronic petitioning is one of the web-based applications in the toolkit. It can be found at www.e-petitioner.org.uk and has the functionality to create petitions; to view/sign petitions; to add background information, to join discussion forum; and to submit petitions. On 14th March, 2000, the Scottish Parliament agreed to allow groups and individuals to submit petitions using the e-petitioner system for a trial period. The special arrangement between the Teledemocracy Centre and the Scottish Parliament has allowed both parties to start to evaluate the use and civic impact of electronic petitioning in Scotland. The development, deployment and evaluation of e-petitioner have demonstrated how straightforward computing techniques can enhance public participation in the newly established Scottish Parliament. As well as the system being used to submit e-petitions to the Scottish Parliament, it is also hosting the first ever e-petition to the British Prime Minister at No.10 Downing St.

1. INTRODUCTION

Widespread claims have been made that democratic politics is in crisis as a result of public apathy, low turn-out at elections, and poor levels of public participation. These claims have coincided with the arrival of 'digital government,' which has brought with it the now widespread concern that a digital divide is widening in society. Our work is derived from a perceived need to investigate how and to what extent information and communication technology can enable a more participative system of governing, supporting both governments and citizens. "Digital Democracy through Electronic Petitioning" focuses on the design, development, and evaluation of information and communication technology to support civic representation and participation in the democratic process. This chapter describes how the International Teledemocracy Centre at Napier University has been working collaboratively with the Scottish Parliament to deploy and evaluate the e-petitioner system for the benefit of citizens in Scotland. By investigating the development and use of electronic petitioning, the Teledemocracy Centre seeks to reveal the conditions that would encourage and assist different sections of society to participate in government through the use of digital democracy systems.

Following this introductory section, section 2 in this chapter overviews the meaning of petitioning in a Scottish context. It does this by examining the petitioning processes for the Scottish Parliament and explains how electronic petitioning was introduced to the Parliament.

Section three considers the e-petitioner system in more detail. The system is one component of a web-based e-democracy toolkit, being developed in partnership with British Telecom, to motivate and facilitate public participation in governance. The toolkit is an exemplar of e-democracy applications, and comprises three web-based tools. As well as e-petitioner, the other tools are: e-consultant which is being used by the Scottish government for consultation over the internet and e-voter which is being used by Highland local authority to elect young people to a Youth Council. A prototype version of the e-petitioner system was developed in late 1999. The final system has the functionality to create petitions; to view/sign petitions; to add background information, to join discussion forum; and to submit petitions. On 14th March 2000, the Scottish Parliament agreed to allow groups and individuals to submit petitions using the Centre's e-petitioner system for a trial period. The special arrangement between the Centre and the Scottish Parliament has allowed both parties to monitor the use of electronic petitioning in Scotland. Section 4 considers the e-petitioner system from the perspective of the Scottish Parliament and describes the

benefits and initial reactions of the Public Petitions Committee of the Parliament to the system.

The evaluation of the system has demonstrated how straightforward computing techniques can enhance public participation in the newly established Scottish Parliament. In our concluding section we summarise our research findings and look ahead to new developments.

2. PETITIONING IN SCOTLAND

In many countries around the world, citizens have used petitions to make their feelings known about issues that concern them. Simply, a petition is a formal request to a higher authority, e.g. parliament or other authority, signed by one or a number of citizens. The format of petitions and the way petitions are submitted and subsequently considered by parliaments varies greatly.

In July 1999 powers in relation to specific areas of government were devolved to the new Scottish Parliament in Edinburgh from the UK Parliament in London under the Scotland Act 1998. One of the main documents setting out how the new Parliament should work was The Consultative Steering Group document (The Scottish Office, 1998). This stated that the Scottish Parliament should aspire to use all forms of information and communication technology “innovatively and appropriately” to support the Group’s guiding principles of *openness, accessibility and participation*.

On the issue of petitions, the Consultative Steering Group stated:

“It is important to enable groups and individuals to influence the Parliament’s agenda. We looked at a number of models in other Parliaments for handling petitions and concluded that the best of these encouraged petitions; had clear and simple rules as to form and content; and specified clear expectations of how petitions would be handled.”

To achieve this the Scottish Parliament established a dedicated Public Petitions Committee (PPC) to actively promote petitions as a means by which the public could effectively raise issues of concern with the Parliament. The remit of the PPC is to consider and report on whether a public petition is admissible and what action is to be taken on the petition. There are no restrictions on who can submit a petition. A petition submitted by an individual will be considered on equal terms with one submitted with a large number of supporting signatures. The PPC considers the merits of the issues raised in each admissible petition and makes a decision on the appropriate action to be taken in each case. This can involve requesting other committees in the Parliament (generally those with the remit to examine

specific subject areas) to carry out further consideration of the issues raised, or requesting the views of, or action by, the Scottish Executive, local authorities and other public bodies in Scotland. Certain petitions have gone on to be debated by the whole Parliament. The Committee ensures that petitioners are kept informed of progress at each stage of the Parliament's consideration of their petition. The actions of the Committee have resulted in a range of positive outcomes, from local solutions to petitioners' concerns to amendments to legislation.

The partnership between the Teledemocracy Centre and the Scottish Parliament began in December 1999 when the PPC agreed to allow an internet-based petition from the Centre's web site sponsored by the World Wide Fund for Nature (WWF) to be the first electronic petition to collect names and addresses over the internet. The PPC subsequently agreed to allow groups and individuals to submit petitions using e-petitioner (Scottish Parliament, 2000). Since then the partnership has worked together to ensure the requirements of the citizen wishing to petition the Parliament electronically are met whilst also ensuring the PPC has confidence in the integrity of the electronic petitioning system. The PPC's web pages have direct links to the e-petitioning system, and their published guidelines on how to petition the Parliament explain the use of electronic petitioning. Figure 1 shows the home page for the Public petitions Committee.

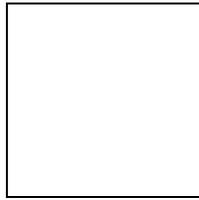


Figure 1. Public Petitions Committee web page

3. THE E-PETITIONER SYSTEM

This section provides a description of the functionality needed in a digital democracy system to support best practice electronic petitioning. Of the key "democratic" requirements of the new Parliament, those which called for *openness*, *accessibility* and *participation* were of most importance to us in developing the system. It was important to ensure that the petitioning process was as *open* as possible. Therefore the names of all people supporting the petition needed to be easily viewed, whilst remaining within the data protection standards. Feedback on what was happening to the petition once it had collected signatures needed to be available. It was

important to provide *access* for as many people as possible, in particular individuals and local community centres running slower machines, therefore flash and large graphic files needed to be excluded. The unequal technical capabilities of citizens demanded that e-petitioner was simple to use and the web pages easy to navigate through. It was also important that features that might make the system difficult for the partially sighted to use were excluded. *Participation* was important such that users could not only show their support for the petition by adding their names but also to comment on it. Also there needed to be an opportunity for those who did not agree with the aims of a petition, or who had alternative opinions, to express their views. In order to assist those who wished to participate make an informed decision on whether to support the petition and to make comments on the petition it was important to provide additional information about the petition.

These overarching democratic requirements were further expanded. In designing the e-petitioning system it was necessary to consider how technology could be used most effectively to support the Teledemocracy Centre's key enabling criteria for the digital democracy systems of accessibility, usability, security, openness and trust. Macintosh et al (2001) describe how the very nature of governance and the fact that government cannot choose its customers means that, in the design of e-democracy systems, these issues become complex.

3.1 E-petitioner Structure

The end-user e-petitioner system is at www.e-petitioner.org.uk. The main sections are the following:

e-petitioner: this is effectively the home page for the e-petitioning system. It lists the e-petitions along with the name of the individual or organisations who originally raised the petition and the current status of the petition. In other words whether it is collecting signatures, closed or whether it has been submitted to the Parliament. It gives the conditions of use for the system and links back to the main e-democracy toolkit page.

View/Sign Petition: this is the main e-petition page. It contains "name of Petition Sponsor", "the petition text", and the "sign petition" facility. Here a user who agrees with the petition issue can add their name and address to the petition. The user is requested to provide a full postal address including postcode and country. The postcodes and countries are summarised and used in the brief to the Parliament. There is also a data protection statement detailing how the gathered information will be used.

Petitioner Sponsors: here the name and address and other relevant contact details for the individual or organisation raising the petition are

provided, where appropriate it provides links to the organisation's own web site.

Information: this shows important additional information, provided by the petition sponsors, which supports the petition and allows the users to be better informed about the petition issue. It was important that the users had this further information rather than just the petition text. Being able to make an informed decision is a vital part of the Centre's e-democracy work.

Comment: this gives the users the opportunity to comment further on the petition. Here they can make comments either for or against the petition and everyone can read their comments and reply to them. Having an integrated discussion forum in the petitioning system was important as it makes the system much more interactive and allows a constructive debate to occur on the petition issue. Previously petitions only provided for people to support a petition to add their name, whilst those against the petition merely withheld their signature. With the e-petitioner system, those in favour have the opportunity to add further information to support the issue and those against have an important opportunity say why the petition should not go ahead or how it should be modified.

View Signatures: this provides a list of the names, along with their countries, of all those who have signed the e-petition; giving any further details of signatories would have breached the data protection act. This allows a small level of transparency in the system with everyone knowing how many people have signed the petition.

Feedback: this important section is to ensure that everyone knows what has happened to the petition once it has closed. Far too often people support issues and then never hear of them again. This section links to the Parliaments main petitions page, gives the number of the submitted petition and allows tracking of the petition through it's life in the Parliament.

The first page of an e-petition on digital inclusion is shown in figure 2.

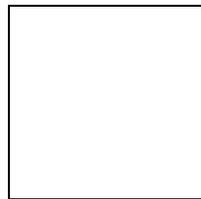


Figure 2. e-petition: Tackling the Digital Divide

As well as the end-user functionality, the management of the e-petitioner system is facilitated by additional password-protected administrative services. These include services to "create new petition", "change petition

details” “view full names and addresses of those signing” and “submit petition”.

3.2 E-petitioner Implementation

To be able to quickly demonstrate and try out the e-petitioner functionality the first version of the system was developed using forms and CGI scripts. It was available from both Explorer and Netscape browsers. Once e-petitioner was accepted for trial use by the Scottish Parliament, the system was updated to make it more robust and to reflect feedback from users and the Parliament. The current version of e-petitioner is hosted on the Teledemocracy Centre’s Windows NT Server and uses Active Server Pages and an SQL Server database. The database comprises a number of tables for the e-petitioner system, the main ones being: Petitions; Signatures; Discussion Comments; and Evaluation.

Special mention is needed concerning security. What level of security is needed? It would be easy to say that it should match the level currently available for paper-based petitions but that then raises the issue of what level of security checks can realistically be applied to traditional paper-based petitions, particularly in terms of checking the authenticity of names and addresses. On the other hand there is always the temptation to say that everything must be checked thoroughly, which is the case for electronic voting, but not necessarily for names and addresses on petitions. Petitions to the Scottish Parliament are not legally binding therefore rigorous security checking to the level that would be needed for internet voting is not required. Instead e-petitioner performs an internal confidence rating check to assess how secure each name and address is. The actual rating depends on a number of factors, for example, Internet Provider (IP) address and how many times the same IP address has been used to sign the petition. These confidence ratings are closely examined prior to submission of the petition to check for any irregularities. The system also automatically removes any duplicate names and addresses.

4. PARLIAMENT’S VIEW OF E-PETITIONER

There are links to the electronic petitioning system from the Scottish Parliament’s web site and links from the Teledemocracy Centre’s web site to the Parliament’s guidelines for petitions. The Scottish Parliament supplies a pro-forma for the submission of petitions in electronic form on its web site, however, submission of lists of signatories is not permitted in electronic format except via the special arrangement with the Teledemocracy Centre.

The Public Petitions Committee and the Centre have designed a template for a brief which is used routinely to summarise the main elements of an e-petition. An important goal was to support the Committee in making a judicious decision about the petition issue. The brief notes the petition title, the names of petitioners and dates the e-petition opened and closed. User statistics are summarised to provide an idea of numbers of signatures and their geographic locations based on postcodes. This is helpful to the Members of the PPC in that it gives them an indication of the geographical spread of those who are in support of the petition issue, both in Scotland and elsewhere in the world. Signature validity is reported on using the confidence ratings built into the system as previously described. The full e-petition text is recorded and background information about the petition sponsors is outlined. Finally, comments made on the integrated discussion forum about the issue central to the e-petition are summarised. The brief is compiled soon after the petition closes. Details are checked by the petition sponsors before it is submitted to the Committee. Subsequently, the brief is distributed along with other authorised papers to the members of the Committee in preparation for the meeting. The brief is then dated and held on file alongside other supporting papers.

There are a number of advantages of e-petitioning. For example, people can obtain background information, make a comment about the issue, sign on-line, and receive feedback about the progress of a petition. With a traditional pen and paper petition, people do not always have very much time to consider the issues at hand. E-petitioner offers better opportunity to sit down and think about the petition's key points in depth before making an informed choice about whether or not to support and sign the petition.

In considering the discussion forum designed into the e-petitioner comments page, the Convener of the Committee, John McAllion MSP, indicated that "it gives ordinary people a chance to air their views and add to the petition issue". While the Petitions Committee always tries to obtain a balanced view from the main parties who have a relevant interest in the issues raised in a petition, e-petitioner provides the opportunity for all those signing a petition to provide their views. A traditional paper based petition only has a number of signatures and so there is no way of obtaining the detailed views of those individuals who support it.

The development of collaborations and links to e-petitioner from civic and professional bodies is considered a positive step forward. Opportunities need to be created to engage with civic society, and involve the voluntary and civic sectors more in the process of petitioning the Parliament. Increased public access to technology through learning centres combined with the collaborations the Teledemocracy Centre has initiated with the community

sector to increase the scope of public awareness about e-petitioner can only benefit this process.

The partnership with the Teledemocracy Centre on this project allows the Public Petitions Committee to support the development of electronic petitioning through its active involvement in the process. It allows the Committee to keep abreast of advances in technology in this area and to evaluate the success or otherwise of the system. This may allow the Parliament to determine, in the longer term, whether it wants to develop a similar system of its own.

It is hoped that feedback from the Committee to the Centre on the way electronic petitions are managed and presented will allow the system to be developed over time and become more tailored to the Parliament's needs. In addition, statistical information which the system can provide, giving details on location of petitioners and other information, will prove useful to the Committee for research and evaluation purposes.

The Public Petitions Committee considers itself to be the gateway for public involvement in the parliamentary process in Scotland. The Committee is continuing to work with the Teledemocracy Centre to promote the development and use of electronic petitioning systems that inform people better and improve and enhance public access to the democratic process.

5. EVALUATION

While digital democracy systems may yet radically transform the functionality, reach and usability of software tools to support democratic decision-making, it is recognised that research so far (e.g. Tsagarousianou et al, 1998) has not supported the claim that technology enhances inclusion and participation in the democratic process. Hence the need to undertake a detailed evaluation of the e-petitioner system. Our evaluation project was funded by the Joseph Rowntree Charitable Trust and began in October 2000 and lasted 6 months until the end of March 2001 (Malina et al, 2001). The effectiveness of e-petitioner was measured through evaluation research, and participant observations were conducted in a variety of public access settings with e-petition sponsors and users. Using this method, it was possible to watch what people did with e-petitioner, and conduct conversations with participants to take account of people's experience of use and their perceptions of e-petitioner and its function as a tool to support democratic participation. Semi-focused interviews were also arranged with Parliamentary committee members to take account of their views. While guide questions were compiled for use, interviews remained flexible enough to listen and take account of each respondent's unforeseen views. Data was

subsequently extracted from observations, interview transcripts and from the on-line evaluation questionnaires which are part of the e-petitioner system.

Findings from this indicate considerable support for the e-petitioning system, with signatories applauding various advantages, in particular the opportunity to be included in what was viewed as more democratic interaction. There was, however, some marked concern that security and confidentiality may yet be problematic. Interesting data was gathered indicating how signatories found out about e-petitioner. This is likely to prove very useful in developing best practice on how to promote and publicise new e-petitions.

E-petition sponsors indicated that they viewed e-petitioner as a useful tool in influencing politicians about issues they considered important. They generally felt e-petitioner was a useful tool complimenting more traditional methods of petitioning. Indeed the ability to access at a convenient time and reach wider sections of society alongside the slower more deliberative processes made possible by e-petitioner were considered inherently more democratic.

In conclusion our collaborative work on electronic petitioning has highlighted a large number of comments and recommendations to take electronic democracy forward.

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FIGURE 1

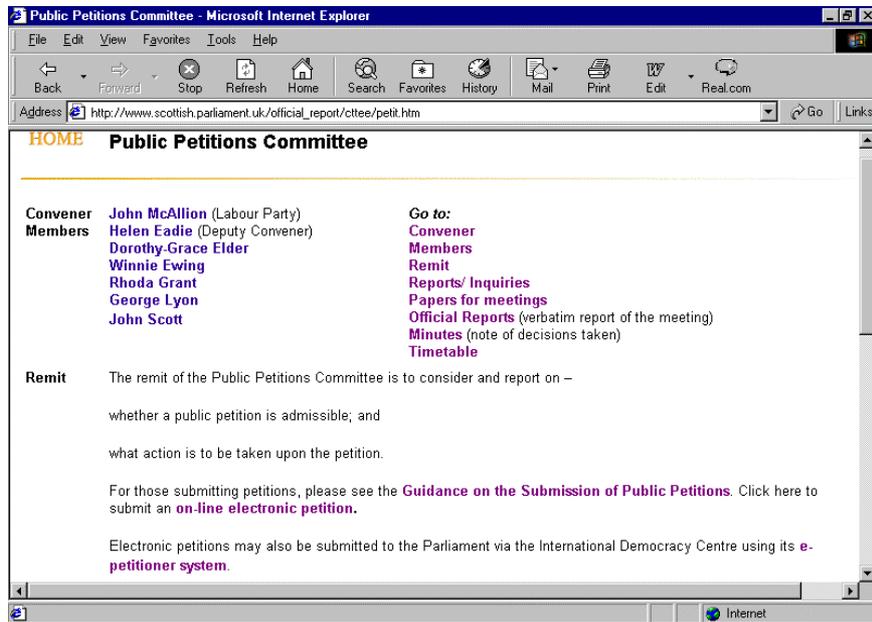


FIGURE 2

