

# **"In the service of democracy" consultation - Response of the Centre for Computing and Social Responsibility, De Montfort University**

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This is a response to the 2002 UK Cabinet Office consultation entitled "In the service of democracy" (<http://www.edemocracy.gov.uk/proposals/>)

## **Chapter 2**

### **Section 2.4**

We are concerned that the separation of the policy into the two issues inevitably means possibilities for direct democracy are overlooked.

#### **Section 2.4.2**

Broadening participation is a laudable aim which we wholeheartedly support. We are, however, deeply concerned that ICTs will make participation easier for those who already are disproportionately represented in participation, while doing little to make participation easier for the bulk of the population. It appears to us that if ICTs have a role in enabling participation, iDTV will have a crucial part to play, and that materials should be designed with iDTV presentation as the expected norm. The style and language of

consultations should assume a much lower reading age than is currently normally required, with non-written presentation (video, graphical and audio) being a technique frequently used.

Thinking in terms of the Internet, in the way the consultation does, risks the design of materials that are most suitable for presentation on PCs or printing on home- or office-printers. Such materials are much less likely to take a style and use language in a way that enables broader participation.

The Internet offers very few advantages in broadening participation over traditional methods of consultation: Internet access is disproportionately skewed to the wealthier who are also those most able to make use of traditional consultation methods. Since travel is rarely required by traditional methods of consultation, beyond getting letters to a post box, people with "disabilities that make travel difficult" are hardly likely to find the process significantly easier to access than previously.

While it is logically possible that "Online channels may also enable participation from people who face social or economic exclusion", a system designed around the use of the Internet is most unlikely to do so. While there are an increasing number of public access terminals in public libraries and similar locations, the degree of convenience of such terminals is easy to over-state. A relatively small proportion of the population makes use of the venues where the terminals are located, and many again, will be those who are not socially or economically excluded. Parents with childcare responsibilities are relatively unlikely to have the time available to read documents and make anything other than superficial responses, except possibly in the evenings after children have gone to bed, by which time such facilities are likely to be closed.

It is true that "young people are . . . among those most likely to be competent in ICT". The mere use of ICT does not, however, make politics relevant to young people. Methods for making politics relevant to young people that are more likely to prove fruitful include:

- giving young people a chance to vote for an MP within a few weeks of turning 18, by having a national bye-election for all those newly qualified to vote every few weeks
- changes to the presentation of politics
- changes to the media that young people view and listen to.

### **Section 2.4.3**

Deepening participation requires that those involved in participation exercises have a well-founded belief that policies might be changed as a result of the consultation, that they are not mere window-dressing prior to the pursuit of policies that have already been decided on, and that policies that were rejected by the consultation will not be re-introduced within a few years if they are still favoured by the Government despite the rejection in consultation.

If, and only if, participants have such a well-founded belief, the sorts of interaction described might be appropriate.

## **Section 2.5**

### **Section 2.5.1**

Given the Government policy of conversion to digital TV within the next ten years or so, we believe the Government's strategy should be based around iDTV, which could give access to the vast majority of families within the home, rather than enabling watered-down access to PCs in UK Online centres which will not necessarily be available when people have free time, or be in a location they can get to when they have free time.

We firmly welcome the interest in the inclusion of people whose first language is not English or who are functionally illiterate. We would recommend that it is extended to include questions about the inclusion of those with low reading ages within consultation processes. It is, however, paradoxical that a report on how to broaden inclusion in consultation is not included within the consultation proper, but will only be available after the consultation has finished.

### **Section 2.5.2**

In our opinion, the restrictions on the availability of information under the Freedom of Information Act 2000 are broadly appropriate, although we are concerned that in some circumstances greater openness than is required by FoI Act 2000 would be appropriate.

### **Section 2.5.3**

We wholeheartedly support the proposal that "an electronic voting system should be established only when it has been shown that it is at least as secure as existing electoral practice". We are, however, deeply concerned that an incorrect judgement may be made, and about the consequences of such an incorrect judgement.

We also are deeply concerned about the proposal that "The security of online voting will be . . . demonstrated through extensive piloting", since the security threats associated with extensive use in a General Election are out of all proportion to the threats associated with pilots in which the political composition of the Government is not in question. While extensive piloting is appropriate, it is logically impossible for such piloting to demonstrate the security of online voting.

### **Section 2.5.5**

It is, entirely appropriate, in our opinion for the Government to provide an online forum for debate and deliberation. It appears to us that such provision would be an essential ingredient of a healthy democracy in the information age. While we do not consider it to be essential that such a forum is provided by Central Government, few other bodies have the inclination and resources to provide such a forum with an adequate level of trained moderation.

### **Section 2.6**

An e-democracy charter may be appropriate to help encourage trust in deliberative participation. In our opinion such a charter is entirely irrelevant to the question of whether electronic voting can, or should, be trusted.

We welcome the proposal for there to be principles related to openness/privacy, responsiveness and deliberation/moderation, but would urge that equality is given prominence as a fourth principle.

The principle of equality should ensure that the views of people who are less computer literate, less fluent in English, or have more difficult, or less, or no effective access to information and communications technologies, carry as much weight as the views of those with easy access and high levels of computer and English literacy. It is crucial in

this that the relative importance given to the opinions of business lobbies as against the views of the general public is reduced. In our opinion, business lobbies can usefully help shape the detail of legislation, regulation and Government policies, but should not be allowed to shape the overall direction of policies (either directly or by the combined effect of apparently reasonable influence over very many details).

We fear that unless a conscious effort is made, moving deliberative participation into the electronic sphere will increase, rather than reduce, inequality, since effective access to relevant technologies is correlated with other inequalities.

## **Section 2.7**

In our opinion the measure of the success of an e-democracy policy would be the extent to which views that are currently marginalised are heard. This might include the views of young people, but care should be taken to ensure that the views of marginalised people over 30 are not drowned out by the views of young people from otherwise well-represented backgrounds that are newly encouraged to participate.

# **Chapter 4**

## **Section 4.1.1**

As outlined in our report to the Government (Fairweather and Rogerson, 2002), we do not believe it is either necessary or desirable for remote voting to be coupled with a national database of voters and central counting facilities. We believe the security risks involved would be excessive, while the data transmitted to the voter to enable them to vote (through a poll card or equivalent) could include data to enable them to contact the correct local database and counting facility to cast their vote, even if they were outside the locality of that facility when casting their vote.

## **Section 4.1.4**

We concur with the CESC (2002) conclusion that "there is currently no way of implementing feasible authentication mechanisms" for online registration, and we cannot foresee a method of implementation for the foreseeable future.

We do not believe that there is any method available for suitably secure text (SMS) voting that meets the other requirements of voting systems. While the CESC (2002) proposal appears to have the potential for being suitably secure in many ways, its reliance on response IDs that voters should check makes it excessively open to coercion of voters and vote selling.

We also concur with Schneier's view that "A secure Internet voting system is theoretically possible, but it would be the first secure networked application ever created in the history of computers."

We do not believe that any reduction in the number of polling stations can be justified until long after 2006, since no matter how simple an electronic voting technique is devised, a significant proportion of voters will wish to use traditional polling stations for the foreseeable future, since a significant proportion of the electorate is technology-averse (these will be disproportionately elderly voters). As computer consultant Robert Logan puts it (2002) "there is an enormous fear of technology in the part of the population that has no qualms about voting - the over 50s really do not trust technology in the same way as the young." If a smaller-than-usual number of physical polling stations is provided, the distances such voters will have to travel to get to these polling stations will be increased, and this can be expected to have an adverse effect on turnout, especially since elderly voters are disproportionately likely to vote at present, and are also disproportionately likely to have mobility difficulties. Even if it does not affect turnout, any such reduction in the number of polling stations will constitute discrimination against voters with disabilities who are unable to use the electronic voting techniques and against voters who are technology-averse.

## **Section 4.2**

It is particularly gladdening to see recognition of the checks and balances of our current voting system, and that equivalent checks and balances will have to be designed into any electronic voting system. We are deeply concerned that the electronic voting pilots that have taken place thus far have not had equivalent checks and balances, and have been characterised by secrecy about software and about other aspects of the technology. We look forward to this situation being rectified.

## **Section 4.2.1**

The CESG report (2002) mentions a number of essential security requirements (at paragraph 95) that appear to have no equivalent in the security requirements at 4.2.1. In particular we are concerned about the lack of consideration of issues surrounding accurate counting of votes, of personnel integrity and of system disclosability (which is essential to provide the checks and balances mentioned in 4.2). Overall, we are concerned and surprised that there is no mention of meeting BS7799.

We welcome the recognition that matching individual identities with votes is labour intensive under present arrangements, and that being labour intensive provides an essential degree of protection

## **Section 4.3**

### **Section 4.3.1**

We note with alarm that the Electoral Commission (2002) concluded about the 2002 pilots that "The primary aim of the e-pilots was to establish the security and reliability of the voting mechanisms and to start to build public confidence; this was achieved."

We concur with Lorrie Cranor of AT&T research laboratories (2002) that "The fact that there were no security problems in a pilot demonstrates nothing. There was not enough incentive for anyone to bother making the effort to break the security".

We are also aware that most of the electronic voting pilots either used Internet Explorer, or enabled its use by Internet voters. As computer consultant Joe Otten of Datator Ltd explains (2002), this is deeply problematic, since Internet Explorer "is designed to be extendable, and therefore to welcome malware with open arms. It is not a question of security oversights that can be fixed."

Similarly, reports of the pilots claimed that security was ensured by password/pin combinations of about 19 digits yet according to Peter Neumann of SRI International, and moderator of the ACM's 'Forum On Risks To The Public' (2002) "Such authentication is more or less irrelevant if the computer systems are as vulnerable to fraud and misuse as they are today." Even if the underlying systems are made secure, password/pin combinations of about 19 digits without use of alphabetical characters are likely to be insufficient, according to computer security consultant Robert Logan (2002).

Similarly, Otten warns (2002) that telephone and text message voting "introduce risks of systematic attack. For example, a simple device attached to a telephone line could alter the pitch of tones representing numbers pressed on the keypad at critical points to change the meaning of a vote."

Overall we can draw no conclusion other than that the security of the voting mechanisms was *not* established. We are deeply concerned that future pilots will have more thorough security analysis by people who are competent and inclined to perform such an analysis.

## Consultation Issue

The priority for the new pilot schemes should be the implementation of an electoral system that meets the requirements for equality of access and use, ease of use, prevention of coercion and vote-selling; as well as the requirements identified in the e-Voting Security Study (CESG 2002) for voter authentication, voter anonymity, data confidentiality, data integrity, system accountability, system integrity, system disclosability, system availability, system reliability, personnel integrity and operator authentication and control. In doing so, maintenance of checks and balances is a prime requirement, and no supplier should be used that requires secrecy of sorts that cannot allow such checks and balances. Prioritising particular technical solutions (such as 'online voting') is inappropriate on any basis other than their ability to meet these requirements. If, as we suspect, it is impossible to pilot a system that meets these requirements, priority should be given to systems that have the potential to move towards meeting these requirements, rather than further piloting of proprietary systems for which it will never be possible to achieve the degree of openness required, or systems which cannot be further developed into suitable systems, such as those that use insecure web browsers as an essential element. "Using a proprietary system would deny basic rights within the context of the current voting system - openness and accountability." (Logan, 2002)

## References

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