e-Parliaments

The Use of Information and Communication Technologies to Improve Parliamentary Processes

Tess Kingham

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> *"E-government is an aspect of the whole issue of governance, the whole issue of the development of the digital revolution, the whole issue of how you address the questions of poverty, how one addresses the question of the digital divide…You cannot simply ignore the fact that technology has the prospect of giving a huge advantage to one segment of the world, leaving behind another segment of the world with an even greater gap to catch up."*
>
> James Wolfensohn, World Bank President, Speech at the World Bank/Development Gateway Conference: e-government in Developing Countries, Washington DC, June 11 2001.

> *"one must ensure that IT serves the mutually supportive goals of creating sustainable economic growth, enhancing the public welfare, and fostering social cohesion, and work to fully realise its potential to strengthen democracy, increase transparency and accountability in governance, promote human rights, enhance cultural diversity and to foster international peace and stability."*
>
> Leaders' Statement, G8 Okinawa Summit

World Bank Institute

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Tess Kingham
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Contents

Foreword

As part of its Governance program, the Poverty Reduction and Economic Reform Division of the World Bank Institute (WBIPR) has sought to strengthen parliamentary oversight – in part, by improving parliaments' representative function and its own accountability to the electorate. In parallel, efforts have been made within WBIPR and elsewhere in the Bank to promote e*government as a means to improve governments' efficiency and effectiveness.

This paper primarily looks at how e*parliaments—the use of ICT to improve parliamentary processes—have developed, considers possible future directions and advocates the adoption of a three-stage model of e*parliament, which will relate strongly to both e-government and e-democracy.

If the application of ICT to parliaments seems nowadays inevitable, then inevitable will be its impact on the functioning of parliamentary institutions. The development of 'e-parliaments' will transform both the ways in which parliaments operate as well as their representative function. The potential to transform parliaments centres on three main areas:
- Increased administrative efficiency
- Improved information access and dissemination
- Enhanced interaction with citizens

These three areas can be translated into a model of three stages of developments of e-parliaments, which if adopted could herald a transformative process that affects in a fundamental way the way citizens relate to the state. E*parliaments have the potential to fulfil a role in improving governance and hence enthusiasm for democracy and the engagement of people with political processes.

Tess Kingham, consultant with the World Bank Institute, is a former Member of Parliament in the British House of Commons. The author would like to acknowledge the comments of Arsala Deane and Najma Siddiqi in the production of this paper. The views expressed herein are entirely those of the author and do not necessarily reflect the views of the World Bank Institute

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1   Introduction

A short definition of on-line governance has been provided by the global survey on on-line governance undertaken by UNESCO and the COMNET-IT Foundation. The survey defined it as a resource providing citizens with access to computer-mediated information, service delivery or dialogue in liaison with government at any level.[1]

There has been a series of international global conferences and initiatives investigating the potential of e-government. This culminated in 2001 in the 'Third Global Forum on Fostering Democracy and Development Through e-government' that took place in Naples, Italy from 15-17 March. At the invitation of the Italian government, more than 1 000 representatives from 122 countries, including many government ministers, the multilateral agencies, the business community and non-governmental organisations came together. There was a wide ranging debate which highlighted the key challenges facing governments in the design and implementation of e-government strategies to meet the expectations and demands for more accessible, transparent and accountable government. The findings and conclusions reached set a challenging agenda for future work.[2] This is only one conference of many[3] and most international organisations, and some governments and not for profit organisations now have working groups or on-line information portals on the subject.[4]

This paper examines the progress of the debate on the impact of Information and Communication Technology [ICT] on governance and the possible future influence of ICT on the development of democratic systems of Government. The paper cannot hope to cover the diversity and range of current debate but is designed as a stimulant to creative thinking on the relationship between e-governance and democracy.

A definition of e-government:

"e-government refers to the use by government agencies of information technologies (such as Wide Area Networks, the internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government.

These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less

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[1] Commonwealth Network of Information Technology for Development Foundation (COMNET-IT). *Global Survey of On-line Governance - Final Report*. Paris: UNESCO, 2000. www.comnet.mt/unesco/
[2], See Appendix 2 for complete list of Recommendations
[3] http://europa.eu.int/information_society/eeurope/egovconf/index_en.htm for details of a EU Conference on *e*Government: "From Policy to Practice": 29-30 November 2001. http://www.apec-egov.org/, for details of an APEC conference in Seoul: "Promoting e-government in APEC countries." 2-5 July 2002.
[4] The World Bank has a site: http://www1.worldbank.org/publicsector/egov/, The Comonwealth Centre for Electronic Governance can be found at http://www.electronicgov.net/about/mission.shtml, The Development Gateway has part of its site dedicated to egovernment http://www.developmentgateway.org/node/130619/, and http://www.e-democracy.org/do/, provides access to a wealth of information and on-line debates.

corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions.

Traditionally, the interaction between a citizen or business and a government agency took place in a government office. With emerging information and communication technologies it is possible to locate service centres closer to the clients. Such centres may consist of an unattended kiosk in the government agency, a service kiosk located close to the client, or the use of a personal computer in the home or office.

Analogous to e-Commerce, which allows businesses to transact with each other more efficiently (B2B) and brings customers closer to businesses (B2C), e-government aims to make the interaction between government and citizens (G2C), government and business enterprises (G2B), and inter-agency relationships (G2G) more friendly, convenient, transparent, and inexpensive.

e-Commerce has evolved already through four stages: 1) publishing, 2) interactivity, 3) completing transactions, and 4) delivery.

To date, most e-government activity has centred on publishing. A study by Anderson Consulting finds vast differences among countries in the maturity of their e-government effort. Perhaps the key finding, however, is that even the most mature countries have tapped less than 20% of the potential."[5]

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[5] www1.worldbank.org/publicsector/egov/definition.htm

2   Theories of Public Participation and the Role of ICT

To appreciate the potential impact of ICT on democratic systems of government, an exploration of the varied forms of democratic participation and their application is needed.

The word democracy is derived from the Greek - *demos,* "the people" and *kratein,* "to rule". Now the dominant form of government in the world, democracy is in fact a relatively recent phenomenon that takes many forms. In common parlance, 'democracy' is used to describe a system whereby people exercise the right to vote in free and fair elections for representatives who are meant to exercise control over a government and its institutions.

It is only when one begins to examine the various systems of government that are termed 'democratic' that the model tends to become fragmented. No two democratic systems are exactly the same; but this does not mean that there are no universal standards against which systems can be judged.

The striving for perfection in models of democracy has been the Holy Grail of political theorists. From the Greek philosophers through to the cyberspace utopianists, political theorists have constructed models designed to increase the level of public participation in democratic forms of government.

It is generally accepted that the greater (in terms both of quantity and quality) the public participation, the more representative government is likely to be. The more accountable the government is for its actions, the more likely it is that decisions will be made in the interests of the majority. The greater the transparency of government decisions the more likely they are to take into account the people's wishes.

Crudely, models of democracy can be divided into three areas.

2.1   Direct Democracy

2.1.1 THEORY AND PRACTICE

This is the purest form of democracy whereby every adult in a state is directly involved in every major decision.

Every citizen actively participates in decision making through regular opportunities to meet, to discuss options and then to express their will. This was the ideal form of democracy favoured by the Greek political theorists and, indeed, by many utopian writers from Thomas More to William Morris.

Although attractive to utopian thinkers, direct democracy has never been introduced as a practical form of state government. Geographical and physical limitations on information-sharing and decision making has meant that direct democracy has only successfully been applied at the local level in communes, co-operatives and villages. There are very few examples of even these small-

scale experiments taking place as they have often proved to be inherently unstable and fall prey to more powerful and aggressive (if less democratic) neighbouring political systems.

2.1.2 ICT IMPLICATIONS

At first glance, the new information and communication technologies seem to offer great possibilities in facilitating direct democracy.

This is the view endorsed by the more ardent of the cyberspace utopianists who argue for a world government of the people by the people. In the wilder realms of political futurology all decisions at a global and local level will be taken by everyone using ICT to create a global interactive parliament. This would remove the need for the election of representatives, as everyone would be able to represent their own views.

It is true that the possibilities of information provision and ease of communications could, in theory, make this possible but it is plain to see that it is as unrealistic as the dreams of earlier advocates of political utopias. Until there is universal access to the necessary ICT this is no more than a dangerous pipe dream that may divert people from the real possible benefits of public participation in already-established forms of democracy.

It is possible that there will be opportunities for wider involvement in decision making in the future particularly at the local level. But it is noticeable that, so far, efforts to involve people in direct decision making through the internet have been fraught with difficulties, and have been notable mainly for the very low levels of participation.

2.2   Representative Democracy

2.2.1 THEORY AND PRACTICE

This is the most common form of democratic government in the world. The basic principle of representative democracy is that the people of a state or locality choose representatives, through an electoral process. These representatives are then tasked with holding the government to account and scrutinising legislation through an institution such as a parliament or a local council.

In most representative democracies, there is a separation of the legislative and executive functions; in some there are separate electoral systems to choose a head of state; and in others a bicameral system of scrutinising legislation. The government of the state, commonly made up of the political party (or parties) with the most members of the parliament, has control over the institutions that implement legislation or administer state functions, such as tax collection or foreign policy. This state model is also widely applied to institutions of local government.

Representative democracy has the largest body of political theory associated with it, much of which is concerned with the challenge of ensuring that democratic systems function efficiently while at the same time retaining their representative effectiveness.

The distinction between the elected person being a 'representative' rather than a 'delegate' of their constituents is a source of frequent debate. The 18th century English political philosopher, Edmund Burke, talked about representatives having a moral authority to act on behalf of those they represent during their period of office, without any need to consult or even to ensure that

they reflect the majority of view of their constituents. Contrary to common misconception, parliamentary representatives are not 'delegates' expected simply to be a mouthpiece for the majority (or most vocal) opinions of their constituents.

Most parliamentary representatives stand for election on a political 'ticket', a stated set of political policies and principles that the voting public can choose to accept (by voting for the person or party) or reject. The representative's role is to consider the views of his or her constituents but then to decide themselves how to take an issue forward bearing in mind issues such as their political party's stance and their personal ethos.

All systems of representative democracy have evolved over time even if a model or blueprint was adopted at the outset. Indeed, any political system that did not adapt to changing circumstances would be failing to adequately reflect the changing views of the people it represents.

2.2.2 ICT IMPLICATIONS

There is now a new challenge and opportunity - to make this system of democracy more representative using the new forms of ICT. In future, ever-improving technology could equip people to convey their views to their representatives more easily. The elected representatives will in turn be empowered through the internet, and e-mail to make better decisions based on wider consultation with those they represent. More effective management and communications systems will assist people, through elected representatives, to hold their government to account as they will possess vastly increased knowledge of that government's activities.

The Parliaments that have embraced the new technology are already perceived to have become more efficient in their internal workings. Individual representatives too have benefited from using ICT to extend their knowledge on a vast array of subjects and to enable them to become better connected with their electorate or constituency.

There is, however, a danger that this new technology could exacerbate the problems of information management for parliamentarians, rather than improving their efficiency Some representatives in countries where email has become a norm for communication have found themselves immediately bombarded with hundreds of e-mails a day, often received from organised lobby groups rather than their own constituents. The e-mail overload has clogged their office systems making them less rather than more effective in their work. There is also the question of how, in an electoral system without defined geographical constituencies, a representative could effectively use ICT to improve their representational function.

If, in future, expectations develop that parliamentary representatives should utilise ICT to garner views on different subjects in order to reflect the majority position through their political actions, the nature of representative democracy will be fundamentally altered. Elected representatives would quickly become transformed into delegates.

What's more this approach begs the question - delegates for whom? The dangers of the 'majority' view being hijacked by organised and wealthy interest groups with the best access to the ICT systems becomes obvious. This is a direct challenge to the very principle of representative democracy - if ICT becomes a mechanism to permit the voices of those that use it most effectively to become dominant in policy-making.

The brief introduction above highlights, above all, that if the appropriate checks and balances are not put in place, the use of the new ICT could significantly undermine rather than increase truly representative democratic.

2.3   Participatory Democracy

2.3.1 THEORY AND PRACTICE

Most political theorists have argued that achieving an advanced democratic state goes further than merely extending suffrage to previously unenfranchised groups. As governments involve themselves more deeply in all areas of a community's life, it is perceived to be important to establish much greater public participation in decision-making and for those decisions to be made, wherever possible, at the level closest to the people. In this model of 'participative democracy' it is argued that people will have more of a stake in their locality, their community and their state. It can be characterised as being a halfway house between direct and representative democracy – it retains some of the best features of both systems.

It is qualitatively different from getting input on views on issues as in representative democracy since people would be actively participating in making the decisions that affect their lives. It is different to direct democracy as people participate in decision-making at the local level but also feed up views through a representative system.

Practical examples of participatory democracy, however, have often suffered from a lack of active involvement of the local community, an unwillingness of the existing holders of power to relinquish control (reluctance to devolve financial decision-making for example) and an inability to balance the competing interests of a multiplicity of participatory organisations. For effective participatory democracy to operate, there must be real commitment from 'the top' to decentralise political power. This is a rare principle for central governments to espouse.

The South African constitution has at its heart a commitment to participatory democracy. To date it has been difficult for South Africa, a new democracy, to put this desire into practice. In part this is a result of the majority of people having a lack of experience of democratic systems of government, but it is also because many people are prevented from fully participating owing to the daily challenges of poverty which they face[6]. It has also been argued that this is also due to a lack of institutional capacity and inter-governmental disputes, particularly between state and provincial levels of Government.[7]

2.3.2 ICT IMPLICATIONS

Participatory democracy is the form of democracy that could best profit from the harnessing of ICT because of improvements in ease of communication and information provision.

Democracy would then be about more than just voting – it would be about participating in decision making and enabling people to take more control over their own development. This

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[6] Campbell Lyons and Tanya Lyons, *"Challenges Posed by Information and Communication Technologies for Parliamentary Democracy in South Africa."* Parliamentary Affairs (OUP). Vol 52, Issue 3, 1999 pp442-450.

[7] Thabo Rapoo, *"Fertile feuding: Conflict and reform in South African intergovernmental relations."* Centre Policy Studies, South Africa. 1999. http://www.cps.org.za/execsumm/pia2.htm

would go beyond the on-line provision of information to people, to encompass the development of direct methods of involving people in decision making about issues that affect them.

The notion of popular participation in democracy through ICT may sound both positive and exciting, but there are hidden threats that must be faced when taking forward any developments in this area.

In most democratic systems, the elected parliamentary representative are the ideal conduit through which actions necessary for the public good are conveyed to local, regional or central government. Elected representatives, responsible to a constituency of voters, are an ideal means of keeping the Executive in check and of assuring government accountability. This ideal has not always been effective as representatives have chosen to be influenced by other factors such as the desire to be appointed to government positions or to obtain monetary or other forms of preferment through abuse of their position. If ICT could increase the level of contact between the electorate and their representatives they could be made more directly accountable for their actions.

If however, through using ICT mechanisms such as mass on-line polls or fora, central government can continually by-pass the elected representatives and establish direct contact with people, the balance of political power in a state shifts, greatly reducing the role and even the necessity of directly elected local representatives.

There is also no guarantee that the vast majority of the population, specifically those in developing countries who are marginalised through poverty, would be able to benefit from the application of ICT to participative democracy as it is still an exclusive means of communicating currently restricted to those with access to resources and power. In addition, the use of ICT in 'bypassing' elected representatives provides a potential gift for corrupt or dictatorial regimes. The Executive would have the ability to control the flow of information and even to manipulate the messages, both those received by - and those conveyed to - the public. This could have the opposite effect to that envisaged by those who seek to harness ICT to promote participatory democracy.

Policy-making would be in danger of being led by populist opinion which would be open to manipulation by those with the technical expertise and money to do so.

3   Democracy and Development

3.1   Links Between Democracy and Development

It is now accepted that there is a link between levels of political democracy, whatever the model, and levels of economic and social development. It is becoming more widely accepted that the more the people are involved in determining their own future through participation in a democratic political system, the more they will have a stake in a stable civil environment within which economic and social needs can be met.[8]

This link between democracy and development is thus connected to the widely accepted paradigm of social and economic development - the greater the level and the better the quality of public participation, the better the outcome.

However, the link is not as clear as some would like to claim. Even the most developed of economies had restrictions placed on political participation as they moved from societies based on agricultural to industrial production.

In the UK, the right to vote was limited to men until the 20th century, in the USA people of colour were not fully enfranchised until after the passage of the Voting Rights Act in 1965. The states that experienced rapid (if unstable in the long-term) growth rates in the twentieth century were not based on a western democratic model. The Soviet Union and Nazi Germany exercised control over rights of democratic participation in an effort to accelerate economic development. Even the successful economies of South East Asia did not necessarily aspire to developing political democracy alongside economic advancement. China is currently experiencing rapid economic growth without a political system that conforms to democratic norms. Indeed, some have argued that the extension of western models of multi-party democracy to Africa has had a deleterious effect on economic development.

What is, however, increasingly obvious is that once states have reached a certain level of economic development, then democratic systems of government produce the most stable economic growth coupled with the most equitable distribution of wealth. Developed democratic systems are the most compatible with developed capitalist economies - freedom of economic activity in the market and freedom of political activity appear to be mutually reinforcing. Developed democracies are less likely to go to war with each other. Democracies encourage gradual political change, which is less disruptive to economic activity. In democratic systems economic interest groups have outlets for discontent through the freedom to associate and vote for parties with differing political and economic programmes. Elections give the people the opportunity to change a government that has prosecuted economic and social policies that are perceived to have failed. It appears to be true that the more transparent the democracy - and the more that people participate in democratic processes – the greater the prospect of stable and long-term economic development.

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[8] *"Building an Equitable World: 2000 Annual Meetings Address":* by James D. Wolfensohn, President, The World Bank Group, Prague, September 26, 2000. **http://www.worldbank.org/html/extdr/am00/jdwsp/**,

Yet if social and economic development is to be based on the extension of participation in democratic systems of government in underdeveloped societies, there is no perfect model to follow and no magic wand to wave. But even without a model of democracy it is increasingly accepted that successful community-based micro-development is based on a participatory process of people articulating and then addressing their needs and aspirations. This lesson is increasingly being applied at the macro-economic level by international development institutions. In essence development is being democratised.

The lessons of economic development are now also being applied to political development and participation is seen as the key.

At the micro level this means empowering individuals to play a full role in their community and to build an independent and vibrant civil society.

At the macro level this means:
1. the building of democratic systems to articulate people's needs and aspirations to accountable representatives;
2. the exertion of continuing political control over the executive by representatives of the people ensuring that people's aspirations and needs cannot be ignored;
3. the opening up of the machinery of government to popular scrutiny ensuring that the articulated aspirations and needs are met.

The new tools of ICT can make a positive contribution to these three areas of democratic development if the right choices are made and resources are made available.[9] But it's clear that some caution needs to be exercised if popular disenchantment with political systems is to be addressed.

3.2   The "Democratic Deficit".

The term "democratic deficit" is used here to examine the widespread and increasing lack of popular engagement in democratic processes. This is particularly acute in the western democracies where levels of voting in all forms of elections are falling.[10] Young people are perceived to be particularly disenchanted with the political process and - as they are the most internet and e-mail literate section of society – many have expressed the hope that the adoption of e-democracy may re-engage them with the political process.

There appears to be very little research to back up this theory. Indeed there is anecdotal evidence that would suggest the opposite effect - as people become more and more engaged with the life that can be led on the internet through gaming technology, chat rooms and product purchase they become less socially and politically engaged.[11]

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[9] For an examination of e-governance in direct relationship to development see R Heeks, *"Understanding e-Governance for Development"*, I-Government Working Paper No.11, IDPM, University of Manchester, 2001. http://idpm.man.ac.uk/idpm/igov11.htm.

[10]Tom Bentley, Ben Jupp & Daniel Stedman Jones, "*Getting to grips with depoliticisation."* Demos, 2000. www.demos.co.uk.

[11] Amy Aidman, *"Testimony to the Democracy Online Project National Task Force"*, Center for Media Education, April 17, 2000. www.cme.org/press/Democracyonline.html.

The assumption that people are not engaging in the political process simply because voting mechanisms are complex is dangerously simplistic. Underlying this simplistic view is the notion that ICT solutions are a panacea that will reinvigorate public political involvement and that if the public were given easier access to voting systems using ICT (e.g. through supermarket kiosks or through home PC's) they would re-engage in the process. However, the real problem lies with more fundamental issues such as general public disillusionment with politicians and public alienation from political parties and policies that they consider irrelevant to them or their family life. If that is the case a concentration on delivering another way of voting is simply diverting attention from the roots of the problem.

The effects of the application of ICT to the processes of democracy must be assessed and monitored much more carefully in order to ensure that the application of technology does not just add a new dimension to the existing democratic deficit by further excluding people from participation in democratic systems of government.

As is so often repeated we are only at the dawning of a new era in ICT. If too much faith is invested in the potential of this new technology without a heavy dose of realism the very opposite effect may be generated to that anticipated by the visionaries of the brave new world of internet democracy. The democratic deficit will deepen. This is particular the case if fundamental questions about connectivity and access is not also addressed.

4   The Digital Divide

4.1   Nature and Extent of the Digital Divide

It's likely that the main stumbling block to ICT enhancing democracy will be the "Digital Divide". This is often examined purely from the angle of connectivity e.g. how easy is it to get on-line in a particular geographical area. Yet, even in technologically advanced countries, internet access is nowhere near universal. People on low incomes, the socially disadvantaged and the politically unenfranchised are less likely to have access to computers and the internet, rendering their ability to participate fully in any internet-based democratic processes unlikely. But lack of access is not just about physical access to resources. There are also social, cultural and linguistic barriers to access that need to be addressed – women[12], the elderly, ethnic minorities often have low levels of access to ICT in developed countries.

In a recent pamphlet written for the Fawcett Society[13] in the UK, Margaret Moran (a Member of the UK Parliament) addresses the issue of the participation of women in on-line democracy projects. She has her own webpages[14] and has been active in organising on-line discussion groups in her Luton constituency.

She notes that men tend to dominate the ICT industry – and indeed the number of women in Information Technology jobs in the UK has recently fallen – but that it is possible to facilitate the participation of women in groundbreaking projects. The fact that the ICT industry is male dominated means that the computer hardware and software are not equality neutral and that this means that there is a need to specifically address the involvement of women in both the ICT workplace and the creation of content.

The Womenspeak project promoted dialogue between UK MPs and women victims of domestic violence. The anonymity of the technology gave women the confidence to speak directly to their representatives about their experiences.

Moran concludes:

"The constraints on women's involvement in the traditional methods of democratic participation are many; the shortage of time, issues of safety, caring responsibilities, and the tendency for men to dominate discussions. The on-line environment offers a number of advantages for women. The interactive nature of the internet allows different levels of participation and involvement at times and places that are convenient for women's lives. On-line dialogue allows women sufficient space to express their views and all experiences are deemed as of equal importance."

It's clear, however, that policy makers will have to strive to ensure that any e-democracy initiative is structured to enable women to participate fully in the process.

It must be stressed that the digital divide is not just about connectivity - it is also about levels of access. Although steps can be taken that enable the non-literate to use ICT it is likely that people

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[12] http://www.worldbank.org/gender/ict/.
[13] Moran M, *"Womenspeak: E Democracy or He Democracy? "* The Fawcett Society, 2002. http://www.fawcettsociety.org.uk.
[14] www.margaretmoran.org

with little or no education will have more difficulty coming to terms with using information and communication tools that are primarily based on the ability to read and write. This is particularly the case as English is the language that predominates on the internet. Other factors relating to cultural and social differences, which mean that gender or other factors such as class, caste or race, reinforce the digital divide.

Put simply, if participation in democratic processes becomes completely dependent on access to the internet, then it's vital that there be universal access to the necessary ICT tools. If this is not the case, inequalities of access will invariably result in a widening of the democratic deficit even if issues relating to connectivity are addressed.

In developing countries, the potential to use the internet to improve governance for the benefit of people is severely hampered by both poor connectivity and access to the internet. As Gudrun Kochendoerfer-Lucius stated to a Global Dialogue (GD7) conference: *"90% of all internet users are living in the OECD countries and more than half the internet users world-wide (57%) are from the US, despite the US making up just 5% of the world's population. Asia accounts for 17% of all internet users, South America for 2% and Africa for 0.7%. Yet the dimensions of the challenge posed by "the global digital divide" are much larger than even those figures make us believe…with 4.8 billion people living in the developing world, (out of 6 billion people total in the world), and the number of people living in poverty – 3 billion living on under $2 a day and 1.2 billion living on less than $1 per day."* [15]

Statistics from the
International Telecommunications Union World Telecommunication Indicators Database.

According to these indicators, the world population was about 6.095 billion in January 2001. For the same period, there were 986 million telephone lines world-wide, of which 541 million were in high-income countries, 137 in upper-middle income, 109 in lower-middle income and 199 in low-income countries…Turning to the internet, almost every country in the world is connected, except for a few economies that had no connection as we entered the new century. Again, ITU indicators show that there were some 361 million internet users at the beginning of the year. These users were spread out as follows: 267 million were in high-income countries, 47 in upper-middle income, 16 in lower-middle income and 31 in low-income countries. In many developed markets, those who want to be on-line already are. However, in developing markets, affordability, awareness and relevance are still placing limits on internet growth. Though developing markets are growing rapidly, the digital divide remains huge. The infrastructure is still not sufficient to allow the internet to become commonplace. In addition, apart from the cost of buying a computer, a subscription for access is still beyond the means of a vast majority of those in developing countries. These costs must be brought down.

End of year message of Yoshio Utsumi, Secretary-General, I TU, 2001 [16]

Increasing the participation of people in the democratic process through ICT is a high ideal to aspire to but it is a crazy dream to people who do not even have a telephone let alone a computer. Relying on ICT to enhance democracy in conditions where universal access is so far from being

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[15] Gudrun Kochendoerfer-Lucius, Director Development Policy Forum, DSE, paper presented to EXPO2000 conference on *"Building Learning Societies: Knowledge, Information and Human Development",* 6-8 September 2000, Hanover, Germany. http://www.unesco.org/education/highlights/expo_2000/learning_societies.htm.

[16] http://www.itu.int/itunews/issue/2001/10/eoymessage.html.

achieved is, in fact, an inherently anti-democratic stance. Especially when poverty is the ultimate barrier.

The lack of access to computers, poor telecommunications systems and the disproportionately high cost of internet access are major barriers for developing countries' participation in e-governance initiatives. As Bruno Lanvin, Executive Secretary of the G8 Dot Force, World Bank has pointed out, *"it is not enough to say that reasonable internet access in the US will cost you US$20 a month and in Venezuela US$100. What is more important to say is that US$100 a month in Venezuela is about 16 weeks of average wage. That gives you an idea of who can really have access"*.

Without effective bridging of the digital divide both in terms of connectivity and access there is a very real danger that there will be a tendency to put power into the hands of the more wealthy and lobby groups, including the more wealthy but not necessarily more representative international NGOs.

4.2   Emerging Initiatives

Several international initiatives have been set up to instigate a global response to the 'digital divide'. Among them are the G8 Digital Opportunity Taskforce (DOT Force) and the United Nations Information and Communication Technology Taskforce (UN ICT TF). These bodies face an enormous challenge because of the significant levels of investment that will be necessary to bridge the digital divide, not just between high and low income countries but also between high and low income individuals. There is however some reason for optimism.

"Fortunately, recent developments in technology promise to reduce costs and help bring the power of information into the hands of large sections of the population. Broadband wireless communications coupled with remote computing and converging technologies can revolutionise the access to information. Mobile devices, which combine the functions of a phone, computer, a television, a pager, a videoconferencing centre, a newspaper, a diary and even a credit card are very much on the anvil."[17]

GrameenPhone in Bangladesh

" The Village Phone program is GrameenPhone's unique method of bringing connectivity to the rural areas of Bangladesh. This program enables Grameen Bank's (a microcredit provider) borrowers to retail telephone service in their respective villages, and has the potential to penetrate the rural areas rapidly and effectively. The Bank operates in 39,172 villages through 1,138 branches and 12,801 workers and its effectiveness is established through a recovery rate of 96% from a borrower base of 2.3 million.

A typical Grameen Bank borrower takes a loan of $100 without collateral from the Bank to purchase, say, a cow. The cow would then produce milk that the borrower could sell to her neighbours enabling her to make a living and pay off the loan. The process allows the poorest of the poor to stand up on their feet. In the case of Village Phone, a telephone also acts as an income generating mechanism for a borrower; a telephone serves as another "cow." A woman borrows about $350 from the Bank and purchases a handset and selsl telephone services to the

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[17] Bridging the Digital divide by Chandrababu Naidu, Chief Minister, Andhra Pradesh, India. Paper presented to International Policy Dialogue: "*The Power Of Ideas - Building Tomorrow's Global Knowledge Economies*" Global Dialogue (GD7), 6-8 September 2000. DSE Forum, Berlin 2000.

villagers, making a living and thus paying off her loan. It creates a self-employment opportunity in each village and provides access to telephones to all.

More than 500,000 subscribers are now using GrameenPhone mobile phones in Bangladesh. It is a remarkable achievement within a very short span of time.

Late last year, GrameenPhone was identified by EMC, the London-based mobile phone market research firm, as the fastest growing and single-largest mobile phone company in the South Asian region. In fact, cell phone users now outnumber the fixed-line telephone subscribers in the country. According to newspaper reports, presently there are more than 650,000 mobile phone users as against 590,000 fixed-line subscribers in Bangladesh.

The growth of the subscriber-base of GrameenPhone has been spectacular over the years. The average growth was more than 100 percent during the last five years while it was over 200 percent in 2000 and more than 150 percent last year. By bringing electronic connectivity to rural Bangladesh, GrameenPhone is bringing the digital revolution to the doorsteps of the rural poor and unconnected. By being able to connect to urban areas or even to foreign countries, a whole new world of opportunities is opening up for the villagers in Bangladesh. Grameen Bank borrowers who provide the services are uplifting themselves economically through a new means of income generation while at the same time providing valuable telephone service to their fellow villagers. Thus, the telephone becomes a weapon against poverty."[18]

Increasingly, internet connectivity is being facilitated by wireless and satellite technology. The spread of mobile telephones gives some indication of the willingness of the rural poor to use advanced technology. In July 1999, Uganda became the first African country where there were more mobile than fixed telephone customers. The growth of mobile communications has been phenomenal. At the start of the last decade there were just over 10 million mobile cellular telephone subscribers around the world. At the beginning of 2001, this figure had grown almost 70 times to over 700 million. Around one in ten people around the world now own a mobile phone.[19] If this readiness to adopt mobile telephones can be transferred to new technological advances which give access to the internet there is some hope of bridging the digital divide.

There are other initiatives that seek to provide internet access in local communities.[20] The ITU, for example, have been promoting the Multipurpose Community Telecentre (MCT) since 1997. An MCT pilot project is testing how providing a range of ICT support in a public area (like a community centre) improves access in remote, rural and undeveloped areas. In Africa, for example, Benin, Mali, Mozambique, Tanzania and Uganda have established MCTs with the support of UNESCO, ITU and the International Development Research Centre.[21] Cyber cafés are also springing up across the world, and they are increasingly centred on providing internet access for local people with, for instance, the UNDP funding a project in Egypt.[22]

Clearly, however, there is still a very long way to go.

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[18] Text from www.grameenphone.com. May, 2002

[19] Michael Minges, *"Mobile internet for Developing Countries"* International Telecommunication Union, presentation at The Uses of the Internet Summit, 2001.
http://www.isoc.org/isoc/conferences/inet/01/CD_proceedings/G53/mobilepaper2.htm

[20] There is a collection of case studies of e-government initiatives around the world at
http://www1/worldbank.org/publicsector/egov

[21] http://www.itu.int/ITU-D/univ_access/

[22] http://www.sdnp.undp.org/it4dev/stories/egypt.html.

5   The Application of ICT to Democratic Processes

5.1   Models of Citizen Engagement

Some academic studies of ICT have already examined how technology could be used to enhance parliamentary democracy. One useful tool that has been adapted to the e-context is Arnstein's 'ladder of participation'[23] which demonstrates the complex interrelationship between information and power strategies.[24]

The ladder is used by Bellamy and Raab to illustrate the way in which ICT can be used to strengthen the efficiency and effectiveness of the state in controlling and serving people, and how, as one moves further up the ladder, ICT can become 'citizen technologies' where power over decision making is transferred directly to people.

A further adaptation of this model is proposed in this paper as a new means of assessing the effectiveness of ICT in buttressing representative parliamentary democracy. The basis of this is the following progression:

1.   ICT is used to improve the internal workings of parliament – [e-parliaments].

2.   governments develop increasingly sophisticated sites which enable people to take advantage of information and the on-line provision of services – [e-government].

3.   ICT makes a contribution to the development of a new form of participatory democracy – [e-democracy].
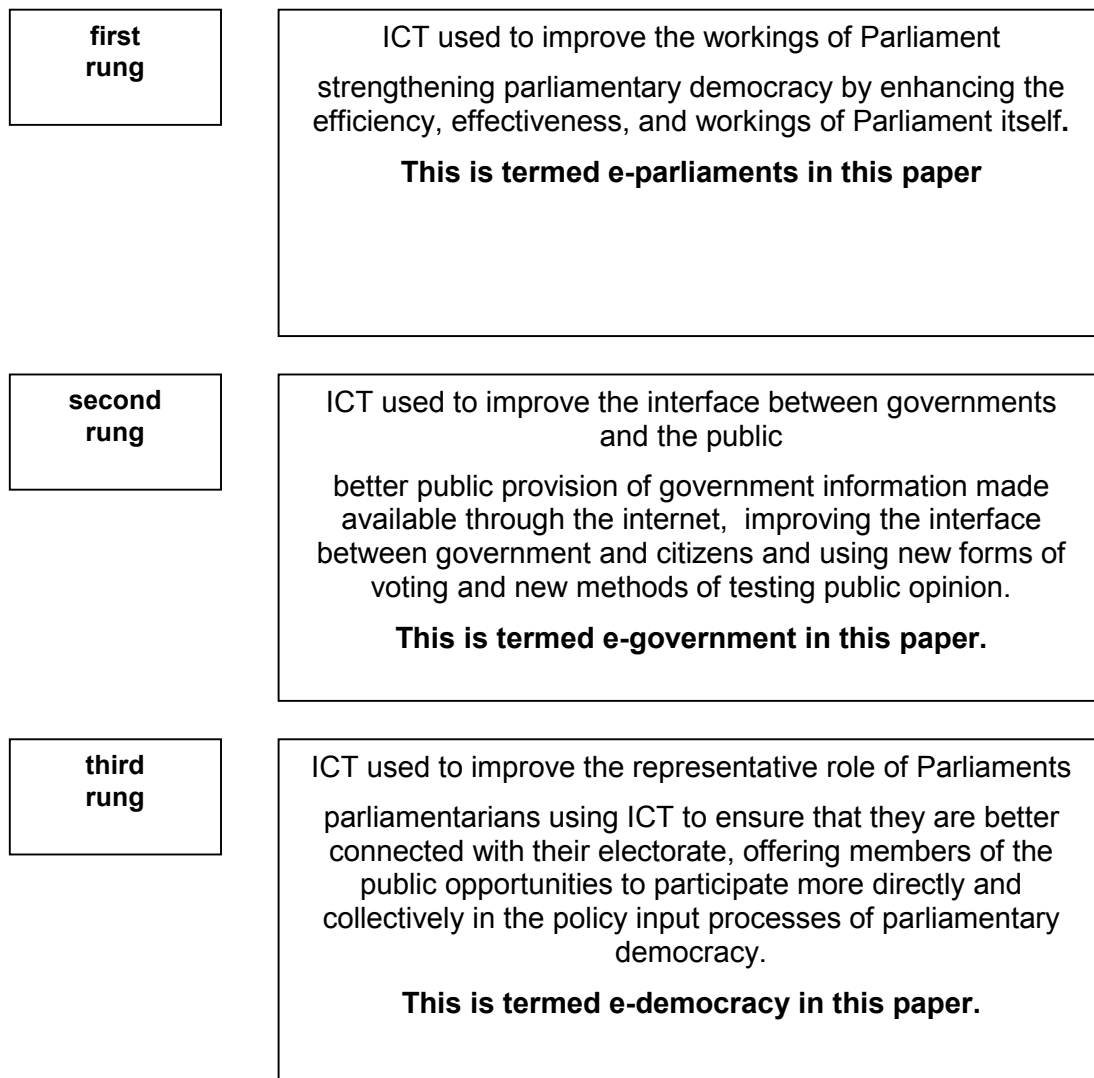
See Fig 1.

The countries that have had the resources to allocate to the application of ICT to governance have usually started by improving the workings of parliament, and have moved on to providing better information and more services on-line. The next step would be for parliamentarians to embrace new ICT technology to improve their representational role. Few members of parliament have as yet managed to take this step up the ladder but there are some recorded examples of best practice. There are probably more practical examples that could be shared through a training scheme.

If this ladder of progress towards participatory democracy were followed incrementally, the result would be a strengthening of the role of parliamentary representatives and democracy itself rather than strengthening the direct links between government and the individual citizen at the expense of weakening the links between people and their representatives.

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[23] Sherry Arnstein, writing in 1969 about citizen involvement in planning processes in the United States, described a ladder of participation. Arnstein, Sherry R. *"A Ladder of Citizen Participation,"* Journal of the American Planning Association, Vol. 35, No. 4, July 1969, pp. 216-224. See appendix one

[24] Christine Bellamy and Charles D. Raab, *"Wiring-up the Deck-Chairs?"* Parliamentary Affairs (OUP). Vol 52, Issue 3, 1999 pp518-534.

Fig 1. Parliamentary democracy and the ladder of information

first rung	ICT used to improve the workings of Parliament strengthening parliamentary democracy by enhancing the efficiency, effectiveness, and workings of Parliament itself. **This is termed e-parliaments in this paper**
second rung	ICT used to improve the interface between governments and the public better public provision of government information made available through the internet, improving the interface between government and citizens and using new forms of voting and new methods of testing public opinion. **This is termed e-government in this paper.**
third rung	ICT used to improve the representative role of Parliaments parliamentarians using ICT to ensure that they are better connected with their electorate, offering members of the public opportunities to participate more directly and collectively in the policy input processes of parliamentary democracy. **This is termed e-democracy in this paper.**

In the following sections, there are practical examples that show how this ladder has worked in practice and the potential for further progress up the ladder of participation.

5.2   e-parliaments - Parliaments as Institutions

Parliaments around the world have begun to harness ICT tools to improve their efficiency as institutions.

The level of development obviously varies and most systems are being constantly updated and modified as technology advances. It is the parliaments with the technological capacity and

resources to devote to the adaptation of existing administrative and information systems that have made most progress in this regard.

However as parliaments are usually based in capital cities where internet access is usually good and as most parliaments have access to resources it would seem that, even in least developed countries, parliaments are beginning to use ICT technology to improve their communication and information capacity.

The Canadian House of Commons, like most parliaments in the industrialised world, provides each member with a private office with furniture and sufficient office equipment such as computers, laser printers, typewriters, TV sets, telephones and other office suppliers. When technology allowed it was decided to provide Canadian parliamentarians with internet access as part of this package. The internet now serves as the fastest, easiest, most inexpensive tool of information gathering and communication.[25]

India has also made significant steps in developing information technology to assist its national parliamentarians with their reference needs.[26] In 1985 a computer centre for managing the Parliament Library Information System (PARLIS) was set up with the help of National Informatics Center (NIC). Various databases have been created (such as Constituent Assembly Debates, microfilms of parliamentary proceedings, bills, Parliamentary Committee reports, biographical data of Members) which enable parliamentarians and researchers to have access to the necessary information about the workings of the national parliament.

In the 1960s, the German Bundestag decided to develop a documentation and information system for parliamentary materials using ICT. There were three stages taken for the implementation:
1. the development of a computerized documentation and information system for parliamentary materials;
2. the obtaining of information from external databases; and
3. a simulation of the consequences of laws based on econometric models.

At the beginning, these databases were only a tool of the administrative services that assisted members of the Bundestag indirectly,[27] but in 1985, members of the Bundestag were provided with direct and personal access. This information source now serves as an important resource for the representative function of German parliamentarians and people.

The Danish parliamentary website was launched on the internet in 1997.[28] The purpose was to make parliamentary documents available to people, the business sector and the media. The website can also be used to obtain information about debates in the parliamentary chamber, MPs and finances. It was set up to serve a functional rather than a democratic purpose. According to Erling Olsen, a former Speaker of the Danish Parliament, and a chief initiator to the website, the website was established with three main objectives:

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[25] Perrault RJ *"Services for Members-Canadian MPs and the resources for representation"*, The Parliamentarian, Journal of The Commonwealth Parliamentary Association, January 1997

[26]Malhotra GC *"Automating Parliaments,"* The Parliamentarian, Journal of The Commonwealth Parliamentary Association July 1995 and Mishra, SN *"House Infrastructure- Support services for Indian's national Parliamentarians* "The Parliamentarian, Journal of The Commonwealth Parliamentary Association, January 1997

[27] Mambrey P, Neumann H-P and Sieverdingbeck K *"Bridging the Gap between Parliament and Citizen-the internet Services of the German Bundestag"*, Parliamentary Affairs (OUP). Vol 52, Issue 3, 1999 pp480-492.

[28] Lofgren K, Andersen KV and Sorensen MF *"The Danish Parliament Going Virtual"* Parliamentary Affairs (OUP). Vol 52, Issue 3, 1pp493-502

1. to give more efficient information services particularly to journalists and politicians
2. to allow politicians, civil servants and the legal system to follow the process of legislation
3. to increase public transparency.

As a result, the Danish website was largely designed for traditional users such as politicians and journalists who have specialist software as well as existing comprehensive knowledge of the legislative process. Although a high number of households and workplaces in Denmark are connected to the web, the majority of the Danish population remains disengaged from the parliamentary website because of the user-unfriendly mode of obtaining parliamentary material. It was revealed that a high number of internet users have made use of the system, but that the active user group is a small circle of people using it for professional purposes. Although initial discussion did emphasize the website as a tool for enlarging democratic participation, the final product became mainly directed to the traditional users. The website accommodates very few possibilities for actual participation and as such it does not enhance the participatory side of democracy in a strong way.

This last example shows the limitations of using ICT to improve the workings of parliaments as a contribution to democracy. Just because parliaments have improved information storage capacity and better internal communication, it does not mean that the application of ICT improves democratic accountability.

Yet it is a logical first rung on a ladder of participation. Until parliaments are using e-mail and the internet as part of their daily workings, there is little prospect that the institutions of government will become more transparent and more accountable through the new media. Still less will the participation of people through the democratic processes be possible using ICT if parliament itself is not using the new technology.

5.3   e-government - Using ICT In New Forms of Government.

5.3.1   CONTEXT

The application of ICT to create a more transparent and open form of government is the most visible and publicly accessible aspect of the application of ICT to the democratic processes.

According to March and Olsen's work on democratic governance[29], there are four ways to understand the contribution of the parliamentary websites to democracy:

1. access and participation;
2. adaptation to the political system;
3. the development of democratic identities and political capabilities;
4. the development of public debates.

Similarly, a recent report outlines six stages of e-government[30]

1. information publishing
2. dissemination of information

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[29] J.G. March and J.P. Olsen, *Democratic Governance,* NY, Free Press, 1995.
[30] Deloitte Research, *At the dawn of e-government: The citizen as customer, 2000.*
http://www.dc.com/obx/pages.php?Name=dr_pubsec_dawn_egov.

3. official two-way transactions
4. multi-purpose portals
5. clustering of common services
6. full integration and enterprise transformation

Most Governments now have a website presence – these vary from a page of information to offering access to on-line public services. A survey undertaken in December 2000 found that most of the responding developing countries had government websites (ranging from 70% in Africa to 100% in the Arab States and Latin America and the Caribbean) and most (72% of the developing countries relative to 61% of the industrialised countries) provided all on-line government information free of charge.[31] In Africa, for example, there are already quite a few notable official general government websites, such as those of Angola, Egypt, Mauritius, Morocco, Mozambique, Senegal, South Africa, Togo, Tunisia and Zambia.[32]

The introduction of modern ICT in information dissemination is a major issue for all governments. Many are seeking to replace traditional bureaucracies with more accessible and transparent administrative systems that utilise the communication and information potential of email and the internet.

5.3.2 ON-LINE VOTING

There has also been great excitement about the future of on-line voting - the use of the new technology to enable people to vote electronically. There is a hope that this will increase voter turnout as it will be easier for people to vote in elections. In essence this merely involves replacing one form of voting with another. The hope is that by providing a new form of voting, that is simpler and more in sympathy with today's lifestyle, voter turnout will be increased.

There has been a lot of interest in the use of ICTs to facilitate on-line voting but it must be said that this is in its infancy and there are very few concrete examples of this being implemented in a way that materially affects voter turn-out.

The first large-scale binding political election to be conducted online was the 2000 Arizona Democratic primary, in which 39,942 voters cast their votes over the internet. The apparent success of this non-public election has led to calls for e-voting to be tested in public elections. Despite the claim that e-voting boosted turnout, fewer than half (41%) of the voters in the Arizona primary voted online - most voted via postal ballot or at a polling station; 89.5% of registered Democrats in Arizona did not vote - the 'success' of the ballot is based upon a 10.5% turnout of eligible voters. Non-white, unemployed, elderly and rural Arizonans were significantly less likely to vote online. In the UK, Bristol City Council allowed residents to vote by phone, internet or post on the level of council tax for 2001/02. 3,063 votes (2.7%) were cast over the internet. Croydon Council also held a similar referendum, where 2,693 votes (3.4%) were cast over the internet[33]

An interesting variation on on-line voting was the setting up of a website during recent presidential elections in Senegal. A website was set up to enable people, both resident in Senegal

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[31] Commonwealth Network of Information Technology for Development Foundation (COMNET-IT). Global Survey of On-line Governance - Final Report. Paris: UNESCO, 2000. www.comnet.mt/unesco/
[32] "*Public Service Applications of the internet in Developing Countries*", UNESCO CI-2001/WS/04 November 2001
[33] *"Online Voting"*, Parliamentary Office of Science and Technology, UK Parliament, POSTnote, May 2001. http://www.parliament.uk/post/pn155.pdf.

and those living abroad, to check their eligibility to vote. This is thought to have had some effect on voter turnout particularly on Senegalese who were resident overseas during the election.[34]

5.3.3 SERVICE PROVISION

Some governments are developing new ways of engaging with people using ICT. Increasingly, services are available on-line - resources are being made available so that people, for instance, can fill in their tax forms on-line.[35]

In the UK, for example, the Office of the e-Envoy, part of the Cabinet Office, has a responsibility across the whole e-agenda, notably e-commerce and e-government. The e-government Group has a clear target that all government services should be available electronically, and in a customer-focused way, by 2005. This will mean the transformation of access to government, which will not be focused on the needs of government departments but on the demands of consumers. Emphasis will be on services available via the internet, although final delivery to the user will be via the most appropriate channel.[36] The internet can play an important function in providing on-line service, particularly through schemes such as the "one-stop-shop", allowing the process of interaction between individual and government to be made coherently without the need to pass from one department to another.

With more and more services available on-line, there are increasing concerns about privacy and a need to establish a legal framework for data sharing, for example to provide a better service or to detect fraud. People who want to use government services on-line can see the benefit of a one stop shop or "joined up" government as service-users and as taxpayers. But joined-up government requires joined-up information and there is often extreme public wariness of the sharing of personal data. Technology needs to be harnessed so people can access government services in complete confidence that information will only be used for the purposes for which it is provided. As ICTs come to dominate some of our lives, the spectre of an authoritarian government having access to a complete data picture of each of its individual citizens comes ever closer. Guarantees about privacy and security of data will have to be trusted by people before they entrust information to governments. As levels of trust in politicians is already low this will be a difficult hurdle to clear

Interactive service applications can save time and government expense by enabling people to rapidly and efficiently provide information needed by government and to receive information selectively required, through more responsive, "customer oriented" services generally more typical of the private sector.

Because most politically disengaged people, especially those most disadvantaged, have their main interaction with government as consumers of public services they have a consumer focused attitude at the moment of contact with government. This means that at this moment the efficiency and effectiveness of government's response to their demands is of paramount importance. If the contact is successful - in terms of clear communication, effective delivery and a coherent system - then it is more likely to engender trust and demonstrate that government can deliver public

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[34] www.mint.sn.

[35]Accenture produce an annual survey of egovernment leadership which assesses how over 20 countries are delivering services to people on-line and scores their performance producing comparative data on performance: http://www.accenture.com/xd/xd.asp?it=enWeb&xd=industries%5Cgovernment%5Cgov_home.xml

[36] http://www.e-envoy.gov.uk/egov_index.htm.

services. This would affect notions of citizenship, and perhaps lead to more active participation. Therefore the delivery of services is crucial in developing the relationship between the excluded and marginalised, and Government both in the developed and the developing world.

Use of the internet by government for administrative purposes is still rare in developing countries but there are a few interesting examples which demonstrate great possibilities for future developments in this area. In one province in South Africa, the "one-stop-shop" model is being introduced, with basic development information, statistics and transactions relevant to people being made available via kiosks and terminals located in communities.[37]

Indeed, use of internet kiosks has been seen as a potential way of providing access in rural areas. But cost, security and maintenance issues, combined with the need for people to be familiar with the technology, may limit this potential.

Bridging the Digital Divide in Andra Pradesh

"We realise that information technology is not an end in itself. It is only a means to achieve the larger and more important goal of good governance.

Our focus has therefore been on SMART government. SMART being the acronym for simple, moral, accountable, responsive and transparent government. Effective use of information technology can help achieve a high degree of accountability, responsiveness and transparency within government. Use of information technology by removing the monopoly of government functionaries in dispensing different services, can potentially be one of the best antidotes to corruption. The transparency that information technology can bring can truly empower people. People can be in a better position to hold public officials accountable if they have access to information.

The internet can become one of the most powerful tools in the hands of an enlightened public.

…For example the computerisation of the Registration department has meant that a sales registration can be completed in less than one hour as compared to more than a week earlier. We have also integrated as part of a pilot project 19 services pertaining to six departments for being delivered on a one-stop mode." [38]

One other experiment in providing access to services through ICT is the Gyandoot project which won the Stockholm Challenge IT Award 2000 in the Public Service and Democracy category. It was described as "a unique government-to-citizen Intranet project ... with numerous benefits to the region, including a people-based self-reliant sustainable strategy. 'Gyandoot' is recognised as a breakthrough in e-government, demonstrating a paradigm shift which gives marginalised tribal citizens their first ever chance to access knowledge, with minimum investment".

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[37] Hodge, J and Miller, J, *"Information Technology in South Africa"*. In; Cooper, C. (ed.). Information Technology Policy and National Economic Development, London: Routledge and Tokyo: UNU Press 1998.
[38] Naidu C, *"Bridging the Digital divide"* Paper presented to International Policy Dialogue: "The Power Of Ideas - Building Tomorrow's Global Knowledge Economies" GD7, 6-8 September 2000. DSE Forum, Berlin 2000.

The Gyandoot Project: A Case Study[39]

The Dhar district in central India has a population of 1.7 million; 60% live below the poverty line. The goal of the Gyandoot project has been to establish community-owned, technologically innovative and sustainable information kiosks in a poverty-stricken, tribal dominated rural area of Madhya Pradesh.

During the design phase of the project, meetings were held with villagers to gather their input. The Gyandoot project was launched on January 1, 2000 with the installation of a low cost rural Intranet covering 20 village information kiosks in five Blocks of the district. Later, 11 more kiosks were set up. The entire network of 31 kiosks covers 311 Panchayats (village committees), over 600 villages and a population of around half a million (nearly 50% of the entire district).

Amongst other services offered at the kiosks there is updated information regarding government grants given to village committees, information regarding government programs, a forum for school children to ask questions, and e-mail (free for information on child labour, child marriage, illegal possession of land belonging to Scheduled Tribes, etc.).

This information makes the functioning of government more transparent. During the first 11 months, the 31 Gyandoot kiosks were used nearly 55,000 times. Twice each day, the person managing the server prints the complaints, applications, and e-mails that have been received and sends them to the appropriate authority. If a complaint cannot be addressed, a reply is forwarded to the kiosk manager. The action necessary to address the problem in the field is expected to be taken within 7-10 days. A reply is received at the server room, which is forwarded to the kiosk manager.

The entire expenditure for the Gyandoot network has been borne by Panchayats and the community with no expenditure burden for the state or national government. The network has been set up at a total cost of Rs. 2.5 million (1 US$= roughly 50 rupees). The average cost incurred by the village committee and the community in establishing a single kiosk was Rs. 75,000.

Agricultural produce rates, land records and grievance services are the most popular features of the kiosks, accounting for 95% of the usage. One clear example underscores the benefits of the kiosks to the rural population:

A complaint brought drinking water to a tribal hamlet of 39 households: The villagers' previous complaint to local authorities had not yielded results for six months. To the surprise of the villagers, their complaint filed through the kiosk brought a hand pump mechanic to the hamlet within two days, and he repaired the hand pump within three hours.

5.3.4 INTERACTIVE INFORMATION PROVISION

Studies have been conducted in recent years in improving the access of information over electronic media such as the internet. The UK Parliamentary website provides a free, easy-to-use

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[39] Case study information originally provided by Subhash Bhatnagar and Nitesh Vyas for http://www1/worldbank.org/publicsector/egov   Date submitted: January 8, 2001. Further information available from http://www.developmentgateway.org/download/135417/Interview_S.Cecchini.doc.

way to keep abreast of legislative stages, parliamentary debate, and Committee reports. There is no question about the amount of information now available on website.

But the increasing use of ICT has failed to stimulate the generation of new kinds of information resources. For instance, in the UK there is no data about individual MPs' voting patterns or their positions on the issues of the day that would make a genuinely fresh contribution to either the processes of representation or to the substance of accountability. [40]

The German Bundestag, the supreme legislative authority in Germany, established its own homepage on the worldwideweb in 1996. Since then, it has been argued that the internet has been playing a significant role in closing the gap between the Bundestag and people in Germany. It can enhance the relationship between parliament and people:

- by increasing public accessibility to the Bundestag,
- by presenting information about the proceedings of the Bundestag in live multimedia form with pictures and networked information,
- by broadening participation of people by providing information on the Bundestag to stimulate interest in further parliamentary work,
- and by bolstering the transparency of events in parliament.

The German Bundestag home page consists of an 'information section' that contains:

Focus	Announcement of on-line public conferences, telephone polls and dates of public events
Topical matters	Information from the Bundestag's own press service, agenda of the plenary chamber etc.
Members	Information about the people's representatives.
The Bundestag Committees	Lists of all the standing committees, committees of investigation, and commissions of inquiry and their composition
European Affairs	Inter parliamentary relations and election data from the EU
Databases	An index of subjects and speakers, text of publications, and plenary transcripts.

The website also has an English version.

Besides the 'information section', there is the 'interactive section' that allows access to live TV coverage and the opportunity to take part in debates.

According to Mambrey, Neumann and Sieverdingbeck the use of internet technology and in particular its website has positively improved the awareness of the work of the Bundestag amongst people in Germany and enabled the electorate to gain a greater understanding of how it works. [41]

As government goes on-line there are more and more opportunities for people to gain access to information and to interact with Government services. But it would be a mistake to see these applications (even including the potential use of on-line voting) as the final rung in a ladder of

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[40] Christine Bellamy and Charles D. Raab, *"Wiring-up the Deck-Chairs?"* Parliamentary Affairs (OUP). Vol 52, Issue 3, 1999 pp518-534.
[41] Mambrey P, Neumann H-P and Sieverdingbeck K *"Bridging the Gap between Parliament and Citizen-the internet Services of the German Bundestag"*, Parliamentary Affairs (OUP). Vol 52, Issue 3, 1999 pp480-492.

harnessing the potential of ICT for the enhancement of democracy. In effect all that is happening is making government more transparent and accessible rather than directly encouraging more active participation in the democratic process.

5.4   e-democracy - The Representative Function of Parliament

There are several well-established, mutually reinforcing phenomena which are associated with the steady decline of parliamentary democracy. In the UK these have been identified[42] as:

- The phenomenon of mass political party and the development of parties as electoral machines which are focussed on winning elections rather than representing their electorate;
- The development of party discipline leading to the control of the elected representatives by the political executive;
- The development of the mass media;

One effect cited is the "elective dictatorship" of majority governments, linked to a growing loss of political competence on the part of both representatives and voters. The result appears to be a growing democratic deficit, as confidence in parliamentary institutions has eroded. This has been reflected in falling voter participation in the electoral process.

ICTs offer the potential for people to participate more actively in the democratic process by permitting more involvement and contact with their representatives. The interactive nature of the internet can serve to play a facilitating role between representatives and citizen.

The Democracy Network

California's Center for Governmental Studies developed the Democracy Network (DNet), one of the most innovative electronic voter guides on the internet.[43] DNet's website was launched during the summer of 1996 and offers candidate- and issue-related information, such as candidate's issue statements, biographical data, endorsements for candidates, and details regarding ballot initiatives.

It also provides a forum for debate among candidates, as well as a medium for citizen-to-citizen and citizen-to-candidate communication through live interviews on the web. The internet offered an unprecedented opportunity to provide equal time, free from the cost and scarcity of broadcasting. DNet targets both national and local constituencies. Users nationwide could access information about the 1996 presidential race. In 1997, users could also obtain information about local elections within the city of LA and plans were under way for DNet to provide content concerning elections in NewYork City and Seattle.

By the end of 1998, DNet was expanded to provide election information in all fifty states, with extensive information on election issues in nine states, and it continues to expand its reach. Within the 9 states that were a focus during 1998, nearly 100% of the major party candidates participated on DNet.

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[42] Christine Bellamy and Charles D. Raab, *"Wiring-up the Deck-Chairs?"* Parliamentary Affairs (OUP). Vol 52, Issue 3, 1999 pp518-534.
[43] Docter S, Dutton WH and Elberse A,"*An American Democracy Network: Factors Shaping the Future of On-line Political Campaigns"* Parliamentary Affairs (OUP). Vol 52, Issue 3, 1999 pp 535-552

The application of ICT could facilitate the making of political demands and the expression of opinions outside the set-piece rituals of elections and the channels controlled by policy networks and parties. This will depend crucially on whether constituents are able to use ICT effectively to hold their representatives, and through them the government, to account.

People often feel distant from government, especially in an age where expectations are higher in terms of openness, transparency and efficiency. ICTs and, in particular, virtual forums for debate, can provide a platform for freedom of speech and a channel through which representatives can be contacted, engaged with and influenced. As yet this form of e-democracy has not developed as quickly as was predicted. People do not seem to wish to engage in on-line debate with politicians and although e-mail is increasingly used to contact representatives this is both causing problems of information overload and can not necessarily be assumed to be the best way of contacting representatives.

OMB Watch conducted a survey to all US Congressional Offices asking how they respond to e-mail from constituents and to determine whether members take e-mail communication as seriously as other forms of communication.[44] Overall, the survey found that Congress has a substantial and growing presence on the internet but that there has been an inadequate response to the possibilities the internet provides for members to reach and to be responsive to the needs of their constituents. Following are the findings from the survey:

1. Nothing is as effective as personal communications- the form of communication that Congressional offices take most seriously when considering a policy position remains the personal letters by mail, followed by personal visits and then telephone calls;
2. For e-mail or any other form of communication to be taken seriously, it should be both personalized and from a constituent;
3. Members are not using e-mail to communicate with their constituents- most Congressional offices that receive e-mail do not respond to the letter via e-mail, instead responding via postal mail. Only 15% of Congressional offices used e-mail to keep up-to-date on issues that may be important to them;
4. Although e-mail on policy matters does not rank high today in terms of how seriously members take it, it is likely to have a powerful role in the future;
5. Although almost all members of Congress have websites, these sites vary greatly in quality and accessibility of information.

While horizontal links between government officials and parliamentarians have been strengthened by the process of applying ICT to parliaments, and service links between government and people can be strengthened by on-line government, this does not necessarily mean that ICTs will strengthen the democratic accountability of representatives.

Walker and Akdeniz[45] observe that representative democracy involves most fundamentally accountability to an electorate, ultimately at election time. In between elections, it is vital that public opinion can be expressed and can continue to exert an influence. They state the openness and accessibility of channels of communication and the possibility of participation are important attributes on which the health of a democracy in part depends.

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[44] Carter M "*Speaking Up in the internet Age: Use and Value of Constituent E-mail and Congressional Websites*" (December 1998). www.ombwatch.org. OMB Watch was formed in 1983 to serve as a watchdog on the operations of the White House Office of Management and Budget (OMB).
[45] Walker, C.P, & Akdeniz, Y., "Virtual Democracy," [1998] *Public Law* 489-506

As people acquire ever more diverse opportunities for accessing information and expressing their opinions, the need to use parliamentary channels may decline unless parliamentary representatives use ICT to make themselves more representative and more accountable.

Precious few studies have been conducted into the phenomenon of stimulating a greater level of engagement with representatives through ICT. It does however appear to offer interesting opportunities to buttress current democratic systems rather than serving merely to undermine the role of representatives. The caveat is that policy makers and decision makers must ensure that access to democratic processes does not become dependent on access to the internet and that countries do not attempt to develop ICT-dominated system of democratic participation in advance of widespread access. This would merely accentuate the democratic deficit rather than help to bridge it.

For representatives to function they need tools for effective administration, efficient communications and comprehensive information management, both information gathering (research) and dissemination (publishing). ICTs are a superb tool (if used correctly) to carry out these tasks.

- Most representatives are understandably and correctly inundated with correspondence from their electorate. The question is how to manage the contact and to give a quick and acceptable response to a communication. The use of email to fulfil this task is accelerating in countries with a high level of internet connectivity.
- Representatives have to be able to access accurate information on a wide range of topics that may concern their electorate. The World Wide Web, government Intranets and CD-ROMs offer unparalleled access to the necessary quality information.
- Representatives need to develop networks of contacts with their electorate to enable them to gauge opinion on issues. The creation of personal websites can be helpful by creating a focus for contact and communication. It can even be used to host discussion groups on particular issues.[46]

If the representative principle of democracy is not to be undermined , representatives will have to harness the power of ICT and be assisted in asserting their role through training and support. Only then will e-democracy become a way of improving representative democracy and moving it towards a more participatory form of government. If the representatives of people find themselves sidelined by the new technology the whole basis of current democratic systems of government are under threat.

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[46] Anne Campbell MP, Andrew Harrop and Bill Thompson, *"Towards the virtual Parliament - What Computers can do for MPs"* Parliamentary Affairs (OUP) 1999 52 (3) 388-403

6   On-line Democracy
Towards a New e-Polity

So far this paper has largely analysed the potential for the internet to improve existing democratic structures.

It cannot be denied that ICT has already made some parliaments more efficient as places of work, some governments more accessible and some parliamentarians more representative. However, there are those who argue that this is not enough. They call for people to seize the opportunities presented by the internet and email to become more actively involved in democratic processes and to use their potential to completely reinterpret the way in which the political system operates.

Schumpeter's analysis of the three stages of technological innovation describes that people first use new technology to replace the old forms (e.g. sending an email instead of using the telephone). In the second stage, people are able to use technological advances to improve the way in which they work (e.g. by using the vast virtual library on the web to replace a trip to the local reference library). It is only at the third stage Schumpeter believes that the full potential of the technology is revealed when people completely transform the way in which they behave.[47]

There are some who apply this model to ICT and are thus calling for a complete transformation of democracy. This would entail the creation of a new form of e-polity in which democratic politics will be transformed by people using the internet to articulate a strong and valid voice in how their lives are governed.

As a long-standing practitioner and advocate of on-line democracy Stephen Clift articulates a strong call to transform the democratic political system:

"I yearn for an extension of the transformative possibilities I have witnessed and directly experienced to other citizens around the world. An on-line, engaged democratic future is too exciting, too important to leave isolated in Minnesota where the Big Woods meets the Great Plains in the middle of North America… People should be able to associate on-line with others in their communities and countries to discuss issues that matter to them. Over time these interactive citizens need to gain access to on-line tools and lessons that will help them do something about the public problems that matter to them."[48]

He relates his practical experience of helping to develop Minnesota e-democracy as a living example of a new form of politics which enables people to use ICT to transform the way in which they engage with the democratic process. There are many lessons which such pioneering organisations are learning – learning points will need to be captured to enable other initiatives to benefit.

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[47] Schumpeter, J.A. *The theory of economic development: an inquiry into profits, capital, credit, interest, and the business cycle* , trans. Redvers Opie, Cambridge MA: Harvard University Press, 1934
[48] Stephen Clift *"The E-democracy E-Book: Democracy is Online 2.0"*.(2000) (p17of 22)
www.publicus.net/ebook/edemebook.html

6.1   On-line Democracy at the Micro Level

A project in India demonstrates possibilities of using ICTs to improve governance at the micro level.

The Chief Minister of Andra Pradesh, Sri N. Chandra Babu Naidu has initiated "Micro Level Planning for Sustainable Development of Kuppam Constituency". The Regional Centre for Urban and Environmental Studies - Osmania University (RCUES-OU) in collaboration with the Government of Andhra Pradesh undertook a massive household survey of the constituency and developed a computerised database for the individuals and habitations of the constituency to help inform future decisions.

This project is designed to create a database of 60,000 households: a questionnaire containing 162 questions about the village's overall status, suggestions to improve the village, lack of satisfaction, means of earning, personal details, family details, etc. was completed through interviews. The main aim of this project was to link the database to a MPHS (Multipurpose Household Survey) database to get the information about a particular village, habitation, panchayat, mandal or constituency and about each and every individual present in the village.

Based on the response given by people to the questions an analysis was made and reports were generated to identify the villages or habitations where the government has to concentrate more resources towards its development. Reports were also generated to show literacy rates, population distribution, availability of schools and hospitals, and social welfare schemes adopted, which could be used to inform decisions.

If decisions about resource allocation can be improved at the micro level through the collection and analysis of data and people can have more direct control over the decisions made by politicians through the application of ICTs then political reality will be forced to change.

6.2   On-line Democracy at the Macro Level

At the other end of the scale, there are ways in which ICT may transform the political landscape internationally.

This paper concentrates mainly on state-level democratic structures but it should not be forgotten that regional and international institutions are becoming increasingly important. Because of the geographic distance involved it's even more important that people have ICT access to gather information about, and to participate in, what's going on beyond the national level.

EarthAction, a global network of citizen groups and legislators,[49] has launched a new initiative to set up an e-parliament - a forum based mainly on the internet, where the world's democratically elected legislators will engage with civil society in a joint search for creative solutions to global problems.

The e-parliament will be designed to:

- Assist the world's 25,000 democratically elected legislators to link up through one internet gateway

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[49] http://www.earthaction.org/e-parl/index.html

- Act as a focal point for the provision of hardware, and technical capacity-building for parliamentarians in the developing world to go 'on-line', thus helping to close a part of the 'digital divide'.
- Contribute to the promotion of global good governance through a 'library' of examples of good legislation and policy deposited on the "E-parliament" site by Parliamentarians and available for use and adaptation by legislators world-wide.

The proposed structure will be quite simple:

- Legislators can self-organise into "InterGroups" around specific issues. Each InterGroup will have a separate meeting space in which participants can: learn about an issue, discuss it with colleagues in other parliaments, draft proposals, consult with people and key stakeholders, and conduct polls.
- An e-parliament Council, elected by the full membership, will ensure that each InterGroup has regular opportunities to bring matters to the full e-parliament in the form of an information bulletin; an on-line hearing (e.g. questioning the head of an international institution); or a poll of all members of the e-parliament.
- Citizen groups and others will also be encouraged to form InterGroups among themselves on the e-parliament site, to develop proposals for the e-parliament.
- A virtual "Parliament Building" will be created in a style resembling other parliament buildings.

The very simplicity of the idea – to link up existing national legislators into a democratic global body – is one of its strengths. At one stroke, it can take a large step towards promoting good governance and enabling parliamentarians from developing countries to have a bigger voice in international policy formulation with the aim of benefiting the world's poor. A few years ago a global body of this kind would have been impossible, but the internet has changed everything.

Although this project is yet to be launched, it does demonstrate the potential of ICTs to create a completely new form of politics – an international e-polity.

7   Conclusions

Analysts have developed a measurement, known as 'e-readiness' to classify a country's status in terms of ability to participate in the 'networked' world. However, despite many studies being undertaken (often duplicated by several researchers) it is still difficult to come to an overall picture of the world's 'e-readiness' as much of this information is not shared.

It's clear, however, that **t**here is a large amount of activity in industrialised countries on the application of ICTs to democracy, but there is little practical activity in this area in developing countries. If representative democracy is to prosper in both developing countries and the newly emerging democracies representatives will have to be seen to hold governments to account in the interests of those who elect them to office. The applications of ICT outlined in this paper have the potential to do this but only with significant investment in the necessary resources and training.

The common failure of democratic regimes in Africa can be partly ascribed to the inability of African parliamentary democracy to generate enduring popular support or assent amongst its citizens, with parliaments often viewed as alien, incomprehensible and distant. [50] In these circumstances, it may seem possible that the introduction of new information and communication technology could be used to improve the standing of parliaments in Africa and thus buttress democracy itself. But the obstacles in the way of such an idea appear immediately insurmountable. A study of the situation in South Africa looks at this issue in context:

1. the current levels of ICT skills are weak and proportionate to levels of education and income; and even many South African MPs do not have computers in their offices. Even though computers are available, they would not have the skills to use the internet and e-mail.
2. access to ICT is non-existent to the majority of people in South Africa with 41% of South Africans still without access to electricity let alone computers.

A third and more fundamental problem is that there are many people, due to the negative experience prior to 1994, who still do not understand the nature of parliament. This ignorance of parliament - coupled with widespread illiteracy, poverty, homelessness and lack of social services - impedes participation by the majority. Thus, it is clear that the apartheid legacy significantly undermines parliament's efforts to transform itself into a democratic institution. While access has been relatively easy to achieve at the most basic level (by literally opening the doors to people), it is harder to achieve equal access in terms of substantive and informed participation in the parliamentary process itself.

So, the ultimate question is can ICT be used to reinvigorate democracy or are the obstacles to high to be scaled with Arnstein's ladder of participation?

It is definitely true that ICT can be used to make parliaments more efficient (e-parliaments) to give greater access to government services (e-government) and to make parliamentarians more representative (e-democracy). All of these steps up the ladder are almost certainly important and necessary for reinvigorating parliamentary democracy. This is happening around the world and as long as the dangers of exacerbating the democratic deficit and the digital divide are adequately addressed real progress will be achieved in these areas.

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[50] Campbell Lyons and Tanya Lyons, *"Challenges Posed by Information and Communication Technologies for Parliamentary Democracy in South Africa."* Parliamentary Affairs (OUP). Vol 52, Issue 3, 1999 pp442-450.

It is also possible that the information exchange and networking possibilities may enable national parliamentarians to work more collaboratively across national boundaries and have a greater impact on issues of global concern by articulating local concerns. Projects that are being pursued such as Earthaction's e-parliament appear to be a valid attempt to respond to growing concern amongst national parliaments that issues that have global resonance, such as global warming and the AIDs epidemic, must be addressed by national parliamentarians at a global level.

There is however a real danger that the application of ICT to develop a new form of participative democracy will deflect people from the task in hand - to make current forms of democracy more transparent, accountable and representative. Incremental development (or a gradual climbing of Arnstein's ladder) may eventually result in a new form of participative democracy. Yet an attempt to impose such a new form of e-polity rather than assisting people in a gradual climb towards it will be a mistake. To stretch the metaphor a little bit too far – people should not attempt to reach the top of the ladder without enough rungs otherwise they may well fall off halfway up!

Innovative projects could be identified that attempt to help parliaments to become more transparent, for governments to be more accountable and to enable people to hold their representatives to account. These initiatives should be encouraged and obstacles to their success removed. Donors should identify e-governance as a funding priority and strategies should be adopted to ensure innovative projects are funded and learning is shared.[51] Parliamentarians can also seek to assist with the development of this new form of democracy. They can demonstrate the possibilities by co-operating fully with any new initiatives to make them more representative through using ICT to encourage participatory democracy.

In the end the success of any such transformation of democracy will depend on the desire of people to participate in building a new epolity. This desire will only be generated if people can see a real impact on their lives by fully participating in democratic processes through ICT. Just as parliaments can be transformed, government made more transparent and parliamentarians more representative it is possible that democracy will become more participative using the apposite tools provided by the internet and email.

This is a possible future for democracy – people and politicians need to seize the opportunities now to shape that future.

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[51] Heeks, R (2001) *"Building e-governance for development: a framework for national and donor action."* I-Government Working Paper No.12, IDPM, University of Manchester. http://idpm.man.ac.uk/idpm/igov12.htm.

Appendix One

Arnstein's "Ladder of Citizen Participation".

Sherry Arnstein was a public policy analyst specialising in health care provision in the USA. Arnstein's ladder was developed in 1969 as an analysis of citizen involvement in planning processes in the United States;[52] since then it has been reprinted more that 80 times and has been translated into several foreign languages.

1.	Manipulation.	The aim is to manipulate the participants so that they comply with imposed planning processes
2.	Therapy	The aim is to impose solutions on the participants with no involvement.
Arnstein characterises these first two rungs of the ladder as non-participation and can not be seen as legitimate citizen involvement.		
3.	Informing	The first rung of citizen involvement but the emphasis is on information provision.
4.	Consultation	This rung may include surveys, meetings and enquiries.
5.	Placation	The aim is to give the appearance of citizen involvement through committees or participatory techniques as it apparently involves people but the real purpose is to impose solutions.
Arnstein characterises these three rungs of the ladder as "degrees of tokenism"		
6.	Partnership	Power over decision making is shared between people and power holders in a genuine partnership.
7.	Delegated power	People have delegated powers to make decisions and the public now has the power to ensure the programme is appropriate to their needs.
8.	Citizen Control.	People take on the entire job of planning, policy making and managing the programme with no intermediaries.
Arnstein characterises these highest three rungs of the ladder as "degrees of citizen power".		

Although Arnstein's ladder is more directly related to citizen's involvement in the planning process it can equally be applied to citizen participation in political processes and the degree of empowerment. When applied to the application of ICT to democracy it is a useful tool to analyse where on the ladder various initiatives sit and can help determine exactly how much people have been empowered by e-parliament, e-government and e-democracy[53].

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[52] Arnstein, Sherry R. *"A Ladder of Citizen Participation,"* Journal of the American Planning Association, Vol. 35, No. 4, July 1969, pp. 216-224.
[53] Ms. Gnei Achnas "*Enhancing citizen's voice in emerging Indonesia",* , a paper presented at the Third Asia Development Forum, Bangkok, June 11-14, 2001

Appendix Two

Recommendations from the Third Global Forum of Naples
March 2001[54]

The following actions and policy options are strongly encouraged by the participants to the Third Global Forum of Naples:

- *Multiply occasions for international best practices sharing and mutual learning on e-government issues;*

- *E-government action plans must be built in partnership with private sector, consumers and non profit organisations, having specific consideration for equal opportunities and the principle of subsidiarity;*

- *Special consideration must be paid to the gender divide and equal opportunities when designing e-government initiatives;*

- *Attention must be paid to the needs of disabled and elderly people when building websites and projecting electronically delivered services;*

- *Citizens' privacy must be considered of paramount importance and broader use made of the existing technologies for protecting personal data and to avoid malpractice;*

- *Establish a peer-to-peer e-relationship between State and citizen, and between State and business, when a public service is delivered electronically, also in order to improve accountability, transparency and trust;*

- *Redesign and not merely adjust processes when introducing ICT in government;*

- *Extending the electronic delivery of public services to all the population, including the "internet – illiterate" by means of, e.g., smart cards, internet kiosks ...*

- *Favour the creation of websites for comparing the best examples of e-government and portals to provide advice and training for e-government implementation for both developed and developing countries;*

- *Foster the setting up of international standards for technical requirements of digital documents;*

- *That the OECD, taking into account the findings of the Naples Global Forum, contribute through its future work programme to the deepening of understanding of the potential and implications of e-government and sharing the results as widely as possible. Moreover, OECD could study tools for a high quality regulatory framework in e-government related matters;*

- *That the G8 dot.force stresses, in its report, the importance of: ICT for development and for fighting poverty; need for specific ICT action plans for each country or group of countries; ICT policies' need for a strong political commitment and of partnership with private sector and NGOs; need for light but effective regulatory framework in order to attract investment and protect privacy of users; human capital enhancement, knowledge-sharing and South-South cooperation;*

- *Support for UN Secretary-General action for ICT for development initiatives (UN ICT task force) and underline the need for coordination with other international initiatives;*

- *Favouring common training initiatives for civil servants in ICTs for governments;*

- *Naples seminars for developing countries on e-government, based on peer sharing and practical education on ICT tools, are considered a good example to be replicated; appreciation is expressed on the announcement that these international seminars will be repeated on an annual basis in Italy;*

- *Fostering regional poles for e-government training based on strong public, private and NGOs partnership;*

- *Fostering indigenous knowledge, local languages and preservation of local cultures by means of ICT.*

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[54] http://www.globalforum.it/htm/frame/inglese/frset_inglese.htm