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Enhancing the capacity of public administration to implement the United Nations Millennium Declaration

Status of and trends in the development of e-government

Report of the Secretariat

Summary

The present report relates to and builds on the report on the capacity of the public sector to support the creation and application of knowledge, innovation and technology for development (E/C.16/2002/5), which was presented to the Committee of Experts on Public Administration at its first session, in July 2002. It focuses on e-government. It refers to the global e-government survey "Benchmarking e-government: a global perspective" that was published online by the Department of Economic and Social Affairs, Division for Public Economics and Public Administration, in 2002 and presents its main findings. It concentrates on the hypothesis that to date, e-government applications — useful and ubiquitous in parts of the world as they are — have proven instrumental in raising the efficiency and effectiveness of public administration. However, much more has to be done to fully realize their promise and potential to deepen deliberative democracy. This particular application of e-government applications remains of great interest to the United Nations as it is a precondition for good governance and therefore constitutes one of the prerequisites for building a peaceful, prosperous and just world, as envisioned in the United Nations Millennium Declaration. The report suggests that Governments should carefully examine and seriously consider introducing e-government applications to their operations. Furthermore, it suggests that the Division for Public Economics and Public Administration should continue to work in the area of e-government development and, in this framework, expand its policy analysis and development, advocacy and awareness-raising as well as advisory and technical cooperation activities. A strong focus of this work should be on the development and application of e-government to empower people and, particularly, to increase the quantity of their deliberative resources and the number of opportunities to use them in the governing process.

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I. Introduction

1. At it first session, held from 22 to 26 July 2002, the Committee of Experts on Public Administration reviewed the report on the capacity of the public sector to support the creation and application of knowledge, innovation and technology for development. Among the challenges the Department of Economic and Social Affairs will confront in the area of public administration, the Committee identified the following:

(a) Public sector institutions must become "learning organizations" that are recognized as strong and strategic organizations;

(b) Capacity-building in support of state governance would require the harnessing of the power of information and communication technologies in support of innovation.¹

2. The Committee encouraged Member States to shift public administration towards a focus on the performance of the whole organization, mission and results, lifelong learning, innovation, life employability with safeguards, horizontal teams and networks, and an outward orientation towards all segments of society. At the same time, the Committee expressed the belief that capacity-building in support of state governance would require capturing knowledge and supporting innovation in the public sector through the building of a learning infrastructure, connectivity and networks and by establishing a legislative network that would be conducive to innovation, encourage private sector investment and promote the use of information and communication technologies (ICTs).

3. Finally, the Committee expressed the belief that public sector institutions could set a powerful example by using knowledge, innovation and technology in their operations. They could transform those operations by encouraging transparency and accountability, improving service delivery, providing services in a citizen-centred way, and making available knowledge and technology that is publicly owned. This confirms the link between governance and transformative innovation in public administration that is supported by knowledge, innovation and technology and, more specifically, by ICT.

II. E-government

4. In any society, the nature of governance hinges to a great extent on the performance and behaviour of the Government. Governments are public organizations through which societies pursue development objectives. Their major functions include the following:

(a) Seeking legitimacy by articulating consensus reached by the sovereign body;

(b) Responding to society's needs, demands and proposals (via aggregating those needs, demands and proposals and producing solutions);

(c) Making itself accountable to the oversight body (via transparency).

5. E-government is a government that seeks to optimize its functions by transforming internal and external relationships with the use of ICT. However, this optimization should not be seen as being about administrative convenience or

automation alone. The link between government (eo ipso e-government) and governance allows relating e-government development to support for the desirable system of governance.

6. The United Nations Millennium Declaration² provides an important background for this analysis. It ties its vision of the peaceful, prosperous and just world, and specifically achievement of selected development goals, to "good governance within each country".³ It records the determination of the Member States "to spare no effort to promote democracy and strengthen the rule of law, as well as respect for all internationally recognized human rights and fundamental freedoms, including the right to development",⁴ "to strengthen the capacity … to implement the principles and practices of democracy"⁵ and "to work collectively for more inclusive political processes, allowing genuine participation by all citizens in our countries".⁶ Furthermore, it confirms the resolve of the Member States "to ensure … the right of the public to have access to information".⁷ What is described here is democratic, participatory governance that empowers people and serves as a means for human development.

7. Placing the development of e-government in this context gives answers to several important questions. It provides a goal against which progress in the development of e-government, that is, the empowerment of people and the contribution to their human development, can be measured. It establishes a domain for this kind of e-government development, that is, all people everywhere. It describes the modality that serves this purpose, that is, participatory, deliberative democracy. All this places ICT application in public administration operations in the position of a servant of people-centred governance, a vehicle for bringing people closer to the United Nations vision of peace, prosperity and justice for all.

III. Benchmarking e-government: 2002 survey by the Department of Economic and Social Affairs

8. There is little doubt, that in the course of the last five to seven years, e-government development has experienced a growth rate that can only be described as explosive: it has grown from 50 official home pages in 1996 to 50,000 web sites in 2001. As this expansion and its actual and potential impact on public administration cannot be overestimated, the Division for Public Economics and Public Administration, in cooperation with the American Society for Public Administration, has undertaken an effort to measure this growth. In May 2002, a global survey of e-government entitled "Benchmarking e-government: a global perspective — assessing the progress of the UN Member States" was published online.⁸ It ranks the countries in the world according to an index that has been developed to capture the capacity (or lack of it) of countries to sustain e-government development.

9. As the text says, "this study ... is in itself a challenge as it attempts to balance both the abstract and the tangible ...". Its results are derived from statistics, evaluation of web sites, interviews and replies to a questionnaire. The e-government index reflects statistical analysis of telecommunication infrastructure, human capital, access to information and the urban/rural divide. Some 1,900 web sites have been reviewed for presence, content, services and information available, as compared with a "scale" marked by the presence (or absence) of applications that are considered to be fundamental, as well as some other, mainly technical features. Replies to the questionnaires have been supplemented by personal interviews and emailed opinions.

10. The survey has found Governments playing the dual role of enablers and users of ICT in public administration. Governments have been found to formulate visions, strategies and plans for e-government development, to determine the regulatory policies and structures and to fund e-government development. They have been using ICT to enhance internal administrative practices, deliver information and services and interface with citizens in the process of governing.

11. Development of the E-government index allowed ranking of the Member States according to their advancement in areas endemic to e-government development (see annex). The index was calculated for 169 countries. Its average value for the world was 1.62. The United States of America was ranked first, with the countries of the Organisation for Economic Cooperation and Development only among the first 10 countries in the world. By region, Norway was first in Europe, with the Czech Republic scoring highest among the European countries with economies in transition. In Africa, Egypt was leading, with South Africa scoring highest among the countries of sub-Saharan Africa. In Asia, Singapore was leading, as was Brazil in South America, with the Bahamas ahead of the other Caribbean countries and Costa Rica ahead of the rest of Central America. In North America, the United States was ahead of Canada and Mexico. Of the 35 countries with deficient e-government capacity, that is, those scoring below 1.0, 25 were in Africa.

12. Roughly half of the countries surveyed featured national Government web sites. The others featured both national and subnational web sites. A total of 36 countries had established single entry points, and only 17 had online transaction capacity.

13. The survey established a scale for assessing web sites that went from emerging (mostly information materials, 32 countries) to enhanced (more sites, more dynamic information, 65 countries), interactive (downloading, e-mailing, 55 countries), transactional (online payments, 17 countries) and seamless (full integration of e-services across administrative boundaries, no countries).

14. Responses to the questionnaire have revealed that the body of experience with e-government development has been growing. The understanding of factors that have a positive impact on the development of e-government has deepened. It has gone beyond the initial preoccupation with the state of the telecommunications infrastructure to include strength of human capital, professional administrative culture, confident public administration, conducive legal and regulatory framework and committed national leadership as well as strong political will that is translated into a vision, plan and financial support. By and large, the enabling environment is understood now to comprise compelling reasons for the Government to go online, its ability to go online and, perhaps even more important, to stay online, and the compelling reasons for the public to go and stay online. The perception of security, easiness and real gain seem to guarantee the latter. A response to pressing national priorities that require optimization of government functions (as a reason for e-government development) seems to guarantee the broadest and strongest support for this effort.

15. Among the factors that hamper e-government development, weak institutions and weak skills top the list. They negatively impact the crucial backroom capacity for providing online services. So does culture that rejects change, especially change that is supported by new technology. Weak technological infrastructure and weak funding capacity are other factors. Furthermore, countries very often regulate themselves in ways that make e-government development difficult. A sustained monopoly on telecommunications is known to lower ICT affordability. No legislation that protects intellectual property or guarantees reasonable levels of privacy is known to hamper demand. The level of synchronization of e-government development on the interdepartmental level remains, as a rule, low, as does the effectiveness of the national e-government management teams, if they exist.

16. The final finding of the survey is of great importance for the work of the United Nations in this area. Many academics as well as civil society representatives and politicians are becoming aware of the gap that exists between the promises contained in most vision and strategic documents and the reality of e-government development. While the prevailing e-government applications focus on the objectively useful transactions with the Government and services by the Government and tend to be skewed to the needs of the business sector, the policy documents promise superior governance, increased citizen participation, open communication, increased social inclusion, enhanced transparency.

17. A related issue concerns the blurring in many studies and reports of the notion of a "consumer" with that of a "citizen". It becomes increasingly clear that, especially at this juncture of e-government development, one has to recognize that private individuals lead two separate lives as far as relations with the Government are concerned. First, they lead the life of consumers of public services. As such, they can greatly benefit from e-government applications that increase the effectiveness and efficiency of service delivery, often improving its geographic outreach. Second, they lead the life of citizens, eo ipso members of the ultimate oversight body of the Government, potentially and actually poised to actively participate in the process of decision-making, governing. This distinction has a great analytical value. In discussions about the impact of e-government, the impact on individuals as customers and as citizens should be distinguished, separated and measured. Both are important as they can add value to people's lives in both these aspects. In real life and in the analysis of real life, one should never be substituted for the other.

IV. E-government at the crossroads

18. No one should attempt to impose limits on the development of technology. People should be cautious, however, in defining the societal context in which they want to live and therefore the limits on the use of technologies so that these technologies can serve and enhance the chosen context, not redefine it. This thesis applies also to ICT in the hands of public administrations. An author writes:

"... an unfortunate shortcoming of technology assessment is that it tends to see technological change as a cause and everything that follows as an effect or impact ... After the bulldozer has rolled over us, we can pick ourselves up and carefully measure the tread marks ... Social activity is an ongoing process of world making ... As we make things work, what kind of world are we making? Are we going to design and build circumstances that enlarge possibilities for growth of human freedom, sociability, intelligence, creativity and self-government? Or, are we headed in an altogether different direction?"⁹

19. It is not true that technology and its application "just happens". It happens as a result of a policy decision that responds to an interest. The same author quotes Plato, who when faced with the technology of a seagoing ship considered it a practical necessity that it must function in a societal context of one captain and an unquestionably obedient crew. This has held true for the past 2,500 years. The same ship, once moored, needs only a night watchman. Considering the transformative power of ICT and the role that Governments play in the systems of governance, in the context of e-government development, the choice between "world-making" and "examining tread marks" has become pressing and all-important.

A. Ongoing world-making efforts

20. The United Nations Millennium Declaration can be viewed as a complete matrix for a global world-making effort. It describes a desirable societal context of peace, prosperity and justice for all. It defines a number of very concrete goals that, if achieved, would bring the world closer to that societal context. It points to "good", i.e. participatory, democratic governance as a modality of choice for achieving these goals. At the same time, recognizing the fact that democratic government is the rule of the majority over a minority and democracies have an unfortunate track record of oppressing and marginalizing minorities, it defines six values as a reference for decision-making by everyone, including democratic governments: freedom, equity, solidarity, tolerance, respect for nature, shared responsibility. As mentioned above, it is in this societal context that the United Nations wishes to see and analyse the development of e-government. The use of ICT in public administration should serve to consolidate this societal context, as defined in the United Nations Millennium Declaration; not redefining it in a diminished way.

21. Other overlapping and mutually reinforcing "world-making efforts" can be identified. One is the quest for human development. Implementation of the Millennium Development Goals would bring the world much closer to this ideal. To use the words of Amartya Sen, "Expansion of freedom is ... both the primary end and the principal means of development. Development consists of the removal of various types of 'unfreedoms' that leave people with little choice and little opportunity."¹⁰ It is a quest for the development of human capabilities through the development of human resources and the creation of opportunities to use these capabilities. Many a government proclaims and actually strives to raise the quality of life of its citizens. Such efforts fall into the global quest towards human development.

22. Another world-making effort builds a knowledge society in which concepts determine the way in which we live and work and add more value to goods and services than any other factor of production. Whether this process is recognized and called by its proper name (that is, transition to knowledge society) or not, every development or regulation that strengthens the knowledge acquisition systems; frees human creativity; allows it to be harvested better and channelled into the social, economic and political life, brings a society closer to this new stage of development.

23. One more world-making effort builds liveable communities and States. These are communities and States that endeavour to cater to the needs and respond to the values of the knowledge workers. Some claim that the "ideo-poleis" in California and in Massachusetts are the first real-life examples of such communities.

24. Finally, an analysis of the changing role of the State seems to indicate that the next stage of government development will be in the direction of a more transparent and accountable government. Such a government derives its legitimacy from a well-informed consensus among its citizens and plays the role of guarantor of the public space — a constantly broadening space that would be ruled by a set of laws that would require all public agents, private individuals performing public functions, public institutions and private firms engaged in the delivery of public goods to behave in a certain way, as public servants do.

B. Driving forces behind e-government development

25. Most of the driving forces behind e-government development follow parts of this world-making agenda. From the point of view of that agenda, no one would object to the national New Public Management coalitions that pursue increased efficiency and effectiveness in public administrations. The New Public Management revolution, where it works, embraces application of ICT in public administration. This brings savings, especially in personnel costs, and raises the quality of public services. It can increase the inflow of revenues. As a result, it can even have a favourable impact on the macroeconomic outlook of the country concerned. Effectiveness and efficiency-conscious knowledge workers are also after the cost and quality of government services.

26. Social development-conscious politicians and civil society organizations see in e-government an instrument for better labour market management, for closing the geographic divides in the supply of public services. The lobby for job creation and small and medium-sized enterprises embraces e-government as a potentially important tool for bringing the market entry and transaction cost down: by curtailing corruption; by cutting the cost and time required to obtain various licences; by offering to small and medium-sized enterprises services that only much larger firms could normally secure; by creating a platform for e-commerce. The international and local business lobby needs digitized data, especially in the trade and financial sector, speed of communication and increased level of transparency. All these are important elements of the development environment. Human development and economic growth can be supported by them.

27. As mentioned before, e-government also offers opportunities for governance development. This potential needs a political coalition behind it in order to be utilized. It needs a strong and focused support coalition, as deepening democracy in the world may indeed be the one single accomplishment that is capable of broadly opening avenues to a more peaceful, prosperous and just future. If e-government can be instrumental in this process, it deserves attention and support at many levels, from many social domains and throughout the world.

C. E-government and the balance between democratic politics and market economics

28. In order to play well their role as pillars of economic growth and human development, both democratic politics and market economics must be given a chance to perform at their best. Additionally, there is an obvious interdependence between the two and some of it may lead to friction. Markets are social institutions and as such can be shaped and regulated by results of the political process. Ideally, they should fit into the societal context that results from the world-making visions societies espouse. If they cannot fashion themselves in such a way by themselves, messages from civil society or regulations that result from the political process do this job. On the other hand, democracies are known to have collapsed when markets have not functioned. As one strengthens, so should the other.

29. For now, markets have embraced ICT and have benefited from it. ICT has made them much stronger. There are even developments that seem to indicate that, with skilful exploitation of ICT by the markets, the invisible hand may start to be directed by remote control. This would signify a systemic change with great consequences. The mixture of the culture industry with geo-demographic systems and vast electronic consumer databases may reverse the relationship between markets and consumers that is supposed to underpin free, competitive markets.¹¹ Interpretation of individuals through a very limited number of behavioural variables can misdirect markets. However, in order to secure high quality of life, they need to respond to the real consumer needs, not to a demand that has been generated in a computer and forced on consumers by the culture industry. Such processes can exacerbate the old spectra of alienation and limited personal fulfilment. They can diminish equality for the sake of freedom through abundance. They can emerge at any level of income, as they are relative and they hinge on perceptions.

30. All this becomes even more important as societies move in the direction of a new driving force — knowledge. Focusing on knowledge raises the premium for looking forward and reacting to the unexpected, not for simplifying the past and extrapolating it with the use of computer models.¹² Even if the markets can correct themselves, as all this concerns phenomena of crucial importance, careful scrutiny of these trends is needed. Only strong democratic politics can play such an oversight role.

31. The pressures of "e-market economics" add to the complexity of the world. This complexity has grown recently because of an increase in the number of relationships that are politicized, require political resolutions (that is, resolutions that are negotiated, compromised, agreed or imposed). Globalization on its own multiplies relationships that have to be negotiated through a political process. In the case of globalization, the feeling of complexity is exacerbated by the realization that many of these political resolutions are now being negotiated outside the national context, in a non-national sphere, with very little transparency or accountability: the global polis lacks an effective global agora. However, easily accessible, high-quality, user-friendly information about these processes would go a long way towards demystifying this emerging complex world. Governments can use ICT to reorganize for production and delivery of such information to citizens. Citizens can hold them accountable for that.

32. This would be one of the many steps necessary to increase the number of deliberative resources in the world. Economic pressures that limit time, energy, attentiveness and interest in public affairs cause a deficit in this area. As the number and complexity of politicized issues grow, citizens discover that they lack substantive experience and expertise. Skills to deliberate and to network are also in short supply. In some situations, citizens lack a voice. In too many situations in the world, it is still dangerous to find and use a voice. In others, political correctness registers a triumphant comeback.

33. It is a sad truth that, in some democratic societies, resources for violence are far more accessible and protected than deliberative resources. An author notes: "... democracy works poorly when individuals hold preferences and make judgments in isolation from one another, as they too often do in today's liberal democracies ... When individuals lack opportunities, incentives and necessities to test, articulate, defend, and ultimately act on their judgments, they will also be lacking in empathy for others, ... information, and [will be] unlikely to have the critical skills necessary to articulate, defend and reverse their views. For this reason, deliberative experiences should be extensively empowered and protected by democratic mechanisms and widely dispersed throughout the institutions of State, economy and civil society."¹³ Governments can use ICT to reorganize for increasing the supply of deliberative resources to citizens. Citizens can hold them accountable for that.

34. Citizens can demand from Governments timely provision of high-quality (for example, truthful, user-friendly), politically useful information and hold them accountable for its delivery. Governments can reorganize and use ICT to cope with this task. With the potential of ICT available to Governments, transparency and disclosure can become a norm. It would greatly increase incentives for private persons to engage in public debates, if ICT in the hands of Governments allows them to become well-informed and well-prepared, even "five-minute" activists. With the use of ICT, Governments can reorganize to actually allow citizens to network with them for the sake of governing via a deliberative process. The biggest part of this reorganization would include a mechanism through which Governments are actually obliged to pay attention. This would go far beyond e-voting.

35. In order to act as citizens, private persons need not only deliberative resources, but also the public sphere, an institutional arena for discursive interaction. Throughout the world, the public sphere tends to be marred by imperfect separation with government (political correctness) and imperfect separation with market (most means of public discourse are operated for profit in an increasingly monopolistic environment). It also tends to suffer from collusion between the Government and the market in shaping the supply of information. Increasing the number of deliberative resources available to citizens would go a long way towards straightening out these aberrations. In addition, as mentioned above, e-government applications that focus on ICT-supported transparency in public administration (as well as businesses) can mend another important imperfection of public sphere in the world, that of the lack of access to information about government (and business) activities and their outcomes.

36. However, by protecting human rights and freedoms, and particularly by guaranteeing freedom of speech, association and assembly, also online, Governments can revolutionize the public sphere. Ubiquitous and affordable, wireless communication appliances using broadband technology can open up

opportunities for limitless networking in large parts of the world in the next 5 to 10 years. They are fully capable of bracketing inequalities of status: affordable ICT is status-blind. With freedoms guaranteed, they can gradually create a new, very broad political class that would consist of multifaceted, networked individuals. It would be in the interest of the public administrations to network with such individuals and with the domains of shared interest that can be created by them. As mentioned above, Governments are just organizations through which societies achieve their development objectives. Societies consisting of networked individuals are free to bypass the Governments that feature little legitimacy or capacity to aggregate societies' needs, demands and proposals and to provide satisfactory solutions. Equally, they can network with Governments for the sake of governing. Existing experiments show that e-government applications can be designed around this trend, speed it up and use it for broad social benefit.

37. Parenthetically, one can admit that, in this situation, a debate about representative democracy versus direct democracy may be necessary. ICT is pushing the world in the direction of eliminating intermediaries, and elected representatives are well advised to start demonstrating the advantage and value that they add to the political process if they intend to remain an element of the political landscape of the future.

38. Somewhat connected with the decline in deliberative capacities is the rise of authority in today's liberal democracies. Increasingly, experts within and outside the Government answer the crucial "why" and even "what" questions in the political process, not the private persons who act as citizens. While any democracy assumes partial and/or temporary suspension of political judgement by the public at large, in the age of ICT, the boundaries of this suspension can be pushed back. Improved information flow from the Government as well as networking of the Government with the citizens can go a long way towards ending the monopoly on judgement by various authorities. Governments can use ICT to reorganize for developing the citizenry, for educating the public about the complex issues of the State. Citizens can hold them accountable for that.

39. Finally, in the ICT-dominated world, Governments can become not only protectors of human freedoms but especially guarantors of privacy. Privacy is a difficult-to-define, culturally specific, as a rule poorly protected and politically contested concept. Yet, it is a value that provides the conditions for enjoyment of human rights and freedoms, for discovery and development of individual identity. Governments can set examples for dealing with privacy issues in the framework of e-government applications. They can also regulate and limit the attempts of the market to invade the privacy of consumers.

40. Democratic politics that feature citizens with weak deliberative resources in a constrained public sphere; democracy in which a lack of high-quality political information, rampant ideology and authority prevail can hardly be expected to constitute a balancing force for market economics augmented with ICT. This is worrisome from the systemic point of view. Perhaps, equally important, they can hardly constitute the force on which implementation of the United Nations Millennium Declaration can rest. On the other hand, ICT in the hands of Governments, if it focuses on strengthening the deliberative resources of the citizens, on broadening and freeing the public sphere, on increasing transparency

throughout the society, have the power to become an important, positive driving force in all the world-making efforts aimed at human development.

41. Thus, at the early stages of its development, e-government seems to have found itself at a crossroads. Raising awareness of its unused potential as a tool for deepening democracy and advocating the use of its power in such a way have become important obligations for the United Nations and for the world community of concerned analysts and practitioners of e-government applications.

V. Tools for building up awareness and advocacy efforts

42. There is a lack of diverse and effective tools for building awareness and advocacy efforts around e-government development and specifically around the use of e-government for deepening democracy in the world. Yet, directing the e-government development effort towards governance development would require such tools. They focus attention and convey a compelling message. While their development must become an ongoing effort shared by many, certain principles for their development can be established:

(a) A shift should occur in the various systems that measure and compare e-government development in the world from quantitative and technical excellence indices towards qualitative indices;

(b) Rankings must reflect agreed values and objectives, with empowerment of people and deliberative democracy featuring prominently among them.

43. By way of example, a scale for comparing the content of various e-government web sites that adopts the objective of strengthening deliberative democracy as its prevailing principle might have the following values (from lowest to highest):

- Transactions with the Government;
- Services by the Government;
- Access to publicly owned information and knowledge;
- Access to information about government activities and their societal outcomes;
- Supply of deliberative resources;
- Connectivity with government for the sake of governing via open and informed debate.

44. A scale for comparing various e-government web sites that adopts the objective of high-quality politically useful information (in the framework of increasing the deliberative resources available to citizens) as its prevailing principle might have the following values (from lowest to highest):

- Posting original, unaltered texts;
- Original, unaltered texts with downloading and search capacity;
- Supply of thematic briefs based on original texts;
- Issue-specific thematic briefs;
- Issue-specific, user-friendly thematic briefs "on demand".

VI. Conclusions and recommendations

45. While policies for e-government development must remain within the domain of sovereign decisions of Member States, Member States should carefully examine and seriously consider the introduction of suitable e-government applications to the operations of their public administrations. Such applications have the potential to raise the effectiveness and efficiency of these operations; to raise the performance standards and image of the public administration; and to serve well the overall developmental goals adopted by the society.

46. As the United Nations Millennium Declaration is concerned with the quality of local governance systems, the Department of Economic and Social Affairs should devote further efforts to analysis, policy development, awareness-raising, advocacy, advisory services and technical cooperation that supports the use of e-government for development, and especially for good governance, including deepening democracy in the world.

47. Within this context:

(a) The Department of Economic and Social Affairs should continue to publish the global e-government survey on an annual basis;

(b) Data collected and analysis presented in the Department's survey should give special attention to the use of e-government for deepening democracy;

(c) Over time, appropriate tools for benchmarking such a use of e-government should be developed and should become part of the methodology applied by the survey.

48. The Department of Economic and Social Affairs should involve leading thinkers and practitioners in the world — from within the United Nations system, from other multilateral organizations, Governments, business and civil society — in visualizing future ICT development and its impact on governance.

49. The Department of Economic and Social Affairs should play an active role in the forthcoming World Summit on the Information Society (Geneva, December 2003), offering insights into its analysis and operational work related to e-government development.

50. The Committee should suggest to the Economic and Social Council that it should devote one of its high-level discussions to e-government and specifically to e-government and development of democracy.

Notes

² See General Assembly resolution 55/2 of 18 September 2000.

⁴ Ibid., paragraph 24.

¹ See E/2002/84, paras. 17-25.

³ Ibid., paragraph 13.

⁵ Ibid., paragraph 25.

⁶ Ibid.

7 Ibid.

⁸ See http://www.unpan.org/egovernment2.asp.

⁹ See Langdon Winner, *The Whale and the Reactor: A Search for Limits in the Age of Technology* (Chicago, The University of Chicago Press, 1986).

¹⁰ See Amartya Sen, *Development as Freedom*, 1999.

¹¹ See Jon Gross, "We know who you are and we know where you live: The instrumental rationality of geo-demographic systems", *Economic Geography*, vol. 71, issue No. 2, April 1995. See also: Charles Hamdy, *The Age of Paradox* (Harvard Business School Press, 1995); W. Lane Bennet, "The UnCivic Culture", *Political Science and Politics*, vol. 31, issue No. 4, December 1998.

¹² See Yogesh Malhotra, "Knowledge assets in the global economy: assessment of national intellectual capital", *Journal of Global Information Management*, July-September 2000, 8(3), 5-15, and also at http://www.kmnetwork.com/intellectualcapital.htm.

¹³ See Mark E. Warren, "What should we expect from more democracy: radically democratic responses to politics", *Political Theory*, vol. 24, issue No. 2, 1996.

Annex

E-government index (2002)

Global Index 1.62											
High e-gov capacity (2.00-3.25)		Medium e-gov capacity (1.60-1.99)		Minimal e-gov capacity (1.00-1.59)		Deficient e-gov capacity (Below 1.00)					
United States of America	3.11	Poland	1.96	Armenia	1.59	Cameroon	0.99				
Australia	2.60	Venezuela	1.92	Brunei Darussalam	1.59	Central African Republic	0.98				
New Zealand	2.59	Russian Federation	1.89	South Africa	1.51	Ghana	0.98				
Singapore	2.58	Colombia	1.88	Paraguay	1.50	Nepal	0.94				
Norway	2.55	Latvia	1.88	Cuba	1.49	Thailand	0.94				
Canada	2.52	Saudi Arabia	1.86	Philippines	1.44	Congo	0.94				
United Kingdom	2.52	Turkey	1.83	Costa Rica	1.42	Maldives	0.93				
Netherlands	2.51	Qatar	1.81	Panama	1.38	Sri Lanka	0.92				
Denmark	2.47	Lithuania	1.81	Nicaragua	1.35	Mauritania	0.91				
Germany	2.46	Ukraine	1.80	Djibouti	1.35	Bangladesh	0.90				
Sweden	2.45	Bahamas	1.79	Dominican Republic	1.34	Kenya	0.90				
Belgium	2.39	Hungary	1.79	Trinidad and Tobago	1.34	Lao People's Democratic Republic	0.88				
Finland	2.33	Greece	1.77	Indonesia	1.34	Angola	0.85				
France	2.33	Jordan	1.75	Jamaica	1.31	Haiti	0.84				
Republic of Korea	2.30	Bolivia	1.73	Iran (Islamic Republic of)	1.31	Mauritius	0.84				
Spain	2.30	Egypt	1.73	Azerbaijan	1.30	United Republic of Tanzania	0.83				
Israel	2.26	Slovakia	1.71	India	1.29	Senegal	0.80				
Brazil	2.24	Slovenia	1.66	Kazakhstan	1.28	Madagascar	0.79				
Italy	2.21	Mongolia	1.64	Belize	1.26	Zimbabwe	0.76				
Luxembourg	2.20	Oman	1.64	Barbados	1.25	Burkina Faso	0.75				
United Arab Emirates	2.17	Ecuador	1.63	Guyana	1.22	Zambia	0.75				
Mexico	2.16	Suriname	1.63	Honduras	1.20	Mozambique	0.71				
Ireland	2.16	Malaysia	1.63	El Salvador	1.19	Sierra Leone	0.68				
Portugal	2.15	Romania	1.63	Guatemala	1.17	Cambodia	0.67				
Austria	2.14	Belarus	1.62	Gabon	1.17	Comoros	0.65				
Kuwaiti	2.12	Peru	1.60	Turkmenistan	1.15	Guinea	0.65				
Japan	2.12			Uzbekistan	1.10	Namibia	0.65				

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Global Index 1.62										
High e-gov capacity (2.00-3.25)		Medium e-gov capacity (1.60-1.99)	Minimal e-gov capacity (1.00-1.59)		Deficient e-gov capacity (Below 1.00)					
Malta	2.11		Viet Nam	1.10	Togo	0.65				
Iceland	2.10		Samoa (West)	1.09	Gambia	0.64				
Czech Republic	2.09		Côte d'Ivoire	1.05	Malawi	0.64				
Argentina	2.09		China	1.04	Mali	0.62				
Estonia	2.05		Pakistan	1.04	Ethiopia	0.57				
Bahrain	2.04		Nigeria	1.02	Chad	0.55				
Uruguay	2.03		Kyrgyzstan	1.01	Niger	0.53				
Chile	2.03		Botswana	1.01	Uganda	0.46				
Lebanon	2.00		Tajikistan	1.00						