



E-STRATEGIES AND THE WORLD SUMMIT ON THE INFORMATION SOCIETY

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The first phase of the World Summit on the Information Society (WSIS) held in Geneva in December 2003 made a commitment to 'build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge'.¹

The WSIS Declaration of Principles sets forth as the common vision for the Information Society that the 'challenge is to harness the potential of information and communication technology (ICT) to promote the development goals of the Millennium Declaration'.² The WSIS Plan of Action is primarily focused on access targets related to connecting ICT with villages, schools, clinics etc. by 2015, thus mirroring the Millennium Development Goals (MDGs) targets for reducing poverty by 2015. Central to this objective is that governments should develop e-strategies and public/private partnerships to extend access to ICTs. This expansion of ICT infrastructure will in turn enable people to have access to information and knowledge and ICT applications will 'support sustainable development in the fields of public administration, business, education and training, health, employment, environment, agriculture and science within the framework of e-strategies'.³ For this to work, 'everyone should have the necessary skills to benefit fully from the Information Society. Therefore capacity building and ICT literacy are essential'.⁴ In addition to developing e-strategies, 'governments need to create a trustworthy, transparent and non-discriminatory legal, regulatory and policy environment' in order 'to maximize the social, economic and environmental benefits of the Information Society'.⁵ Attention will also be paid to issues of cultural diversity and identity, linguistic diversity, local content, the use of media to develop the Information Society as well as ethical dimensions such as the protection of privacy and personal data.

The WSIS Plan makes access to technology its primary goal – that by 2015, more than half the world's inhabitants have access to ICTs within their reach. Like the MDGs, the WSIS Plan has a number of specific targets that are to be reached by 2015. Of these ten targets, eight require connectivity to ICTs, whether to villages, schools, scientific centers, libraries, health centers, government departments or access to television and radio services.

International organizations have been promoting the development of e-strategies for a number of years. The International Telecommunications Union (ITU) and the United Nations Development Programme (UNDP) have established projects to help countries develop e-strategies. The G8 Digital Opportunity Task Force played a leading role in developing a matrix for e-strategies and this work continues under the UN ICT Task Force, whose Working Group 2 is responsible for e-strategies. At the end of 2003, UNDP estimated that more than 90 countries had developed e-strategies.

¹ World Summit on the Information Society: Declaration of Principles, Geneva 2003: section 1

² World Summit on the Information Society, Declaration of Principles, Geneva 2003: section 2

³ World Summit on the Information Society, Plan of Action, Geneva 2003: section 14

⁴ Ibid section 11

⁵ Ibid section 13

The Significance of E-Strategies in WSIS

The significance of WSIS is that it has become the site where e-strategies were placed on the world's agenda and validated as important policy instruments for ICT, development and the Millennium Development Goals. This linkage between ICTs and the MDGs has now been explicitly made whereas it was only a suggested relationship in the Millennium Declaration. Obviously, the WSIS Plan of Action is only a plan at this stage but it does create a space for all stakeholders to engage on the issue of e-strategies and ICT for development.

WSIS has affirmed that e-strategies are an essential component in the use of ICT for development. This is significant for a number of reasons:

- ?? First, e-strategies assume that ICTs are important enabling tools to support the process of development. Hence, one of the goals of ICT policy has now been achieved on the global stage – WSIS has affirmed the positive relationship between ICTs and development.
- ?? Second, e-strategies contain a particular approach as to how ICT for development will be achieved – through the collaboration of stakeholders in government, the private sector, civil society and international organizations, i.e. e-strategies should be initiated by governments but depend on the participation of stakeholders for their formulation and implementation.
- ?? Third, e-strategies are concerned with bringing the impact of the internet and its importance in enabling development into focus as part of social and economic policy – e-strategies mark a shift from the old sectoral framework for policy-making based on broadcasting, telecommunications and information technology to a new layered framework for policy-making on ICTs, in which the role of all these sectors is conceptualized in an integrated approach – see figure 1.

The question is how to understand the window of opportunity WSIS provides for progressive civil society organizations to engage with the process of making e-strategies meaningful instruments that can make a real difference on ICT for development.

The Shift from Sectoral to Layered ICT Policy Frameworks

To do this it is necessary to return to the nature of the shift between the old vertical sectoral policy framework to the new horizontal layered policy framework and see what implications this shift has on the making of e-strategies. The sectoral framework was based on the distinct communications sectors that existed prior to the technological impact of convergence and digitalization and the socio-economic effects of globalization on communications. The sectors of broadcasting, telecommunications and IT were distinct and each had its own policies, actors and institutions organized at the national level. During the 1990s, the combination of globalization, convergence and digitalization began breaking down these distinctions between the content and carriage of information:

- ?? The crossborder activities of transnational corporations investing in other countries' networks and building globally distributed networks began to reshape the national and global distribution of telecoms;
- ?? The internet represented this convergence of video, telecom and IT on a global basis and posed a challenge to policy makers regarding the old sectors;

?? The shift from analogue to digital forms of information made it impossible to distinguish between voice and data as digitalization transformed electronic signals into binary code.⁶

The new ICT policy framework is based on layers - physical, logical and content and services, as shown in figure 1.⁷

The physical layer is concerned with questions of infrastructure. The first issue is universal access to national and global networks. The second issue is how to deal with bottlenecks that reduce the efficient operations of networks. Such bottlenecks might result from problems with interconnection, interoperability and open access as well as vulnerabilities such as security.

The logical layer is concerned with threats to open internet usage at the level of software. For example, where one of the positive features of electronic technologies was initially disintermediation, i.e. removing the middleman, there are a variety of new intermediaries and mediating tools such as portals, filters, browsers and search engines, that may become dominant and limit access. The issue of open source software cuts across this layer.

The content and services layer addresses the policy issues related to freedom of expression and access to information, communication rights, local language and culture, intellectual property rights, and consumer protection.

The full impact of this shift in framework is still being registered and is currently captured in the push to develop broadband networks at the same time that the old sectors of broadcasting, telecoms and IT continue to co-exist as distinct industries. The challenge is to think in terms of the new framework in devising e-strategies for development. In practice, this means locating the sectoral policies on broadcasting, telecoms and IT in their historical context:

- ?? They were addressed differentially but now need to be addressed in an integrated manner;
- ?? They were addressed nationally and now need to be addressed regionally and globally;
- ?? The values and rights animating each sector need to be re-imagined for the new framework.

This requires re-engineering the policy process to move it decisively away from the sectoral framework and to explore the full implications of the layered framework on a holistic basis. The European Union has taken this process to an advanced level in its 1999 Communications Review which introduces the notion of an electronic communications service, which covers all forms of communications networks regardless of their technology with the exception of public broadcasting services.

In trying to re-engineer the policy process, a number of obstacles arise that need to be taken into account:

⁶ Nicolas Negroponte: Being Digital, Hodder and Stoughton, 1995

⁷ Stefaan Verhulst: Mapping ICT Policy – Issues, Values and Processes, presentation in Belgrade, 2004 I am grateful to Stefaan for his keen insight into the shift from a sectoral to a layered ICT policy framework.

- ?? The carry-over effect of the sectoral framework on the present environment for ICT policy-making;
- ?? The tendency of the WSIS Plan of Action to consider access to ICTs as a technical and quantitative matter;
- ?? The need for regional e-strategies.

The Carry-over Effect of the Sectoral Framework on ICT Policy-making

In the 1990s, the Washington Consensus – essentially an informal agreement between the international financial institutions of the International Monetary Fund (IMF), the World Bank and the US Treasury – promoted fiscal austerity, privatization and market liberalization as three pillars of growth for developing countries and countries in transition in a context of globalization. The Washington Consensus has in the last few years been subject to review and criticism partly in recognition that it promoted one particular version of economics – market fundamentalism – over all other options and hence lacked flexibility to make trade-offs and adjustments to the economic prescriptions imposed by the international finance institutions.⁸

In the telecom sector, the Washington Consensus involved developing countries in making telecom reform policies that contained a combination of privatization, liberalization and regulation. The issue of universal service was seen as a by-product of the new model. However, what the Washington Consensus did not specify was the best method for combining and sequencing privatization and liberalization to open the market. Individual countries essentially had a choice between privatization and liberalization simultaneously or privatizing the public telecom operators (PTO) first and then opening the telecom market to competition in a liberalization process.⁹ Telecom regulators were also to be established to oversee the reform process impartially.

Studies of telecom reform have tended to show that the sequencing process matters to the extent that simultaneous privatization and liberalization has produced dramatically higher growth in tele-density in countries such as Chile as opposed to countries such as South Africa, which privatized first and phased in liberalization later.¹⁰ In South Africa, the privatization of the PTO, Telkom, was accompanied by a five year period of exclusivity which coincided with the dramatic expansion of the internet in the late 1990s. A damaging anti-competitive turf war broke out between Telkom and emerging Internet Service Providers (ISP) that were dependant for telecom facilities from Telkom at the same time as Telkom competed with ISPs for customers.¹¹ South Africa's position of 14th in the world for internet access in 1996 slumped in a matter of years and ICT development was severely inhibited.

⁸ Joseph Stiglitz: *Globalization and its Discontents*, Allen Lane the Penguin Press, 2002, p220

⁹ Aileen A Pisciotta: *Global Trends in Privatisation and Liberalisation* in William Melody (ed) *Telecom Reform Principles, Policies and Regulatory Practices* Technical University of Denmark 2001

¹⁰ Scott Wallsten: *Does Sequencing Matter? Regulation and Privatization in Telecommunications Reforms* Development Research Group, World Bank, 2002

ITU World Development Report: *Reinventing Telecoms*, 2002

¹¹ William H Melody, Willie Currie & Sean Kane: *Preparing South Africa for Information Society 'E-Services': the Significance of the VANS Sector* in *The Southern African Journal of Information and Communication* Issue No 4, 2003

The ITU has argued that “privatization without competition is good, but privatization with competition is better”.¹² This is an assessment from hindsight – at the time telecom reform policies were being introduced in the 1990s, Chile’s approach to sequencing was regarded as a radical form of ‘big bang’ liberalization. Now it is clear that it was the best approach. The problem facing many developing countries which did not privatize their fixed line monopolies when they liberalized their mobile sectors is that the success of mobile has made fixed line operators unattractive to investors – especially after the recent telecom downturn. Hence they lack adequate fixed line infrastructure to carry internet access. Governments are then stuck with unattractive fixed line assets while at the same time there is pressure to liberalize the telecom sector completely to introduce new technologies such as Voice over Internet Protocol (VOIP) and wireless internet, which can introduce the access to ICTs which the public fixed line operators have failed to do. This can lead to a certain paralysis in governments as to how to deal with their ownership of moribund fixed line operators while having agreed to extend access to ICTs dramatically in terms of the WSIS Plan of Action.

The history of a country’s telecom reform process will have a direct bearing on its e-strategy. Yet e-strategies tend to ignore the impact of telecom reform on the national information infrastructure and the complex web of political and economic relationships between governments, the private sector and civil society forged during the telecom reform policy process. Policies, laws, contracts and universal service obligations as well as the experience and credibility of the regulator will have a direct bearing on the success of any e-strategy. It is also interesting to note that at the time many telecom reform policies were being drafted, the internet was on the cusp of a new wave of development around the introduction of the World Wide Web and the common notion at the time was that the internet could not be regulated.¹³ Consequently telecom reform policies tended to ignore the internet and one of the effects of this lack is that the internet became subject to regulation by default.

In addition to this, the incorporation of broadcasting into the ICT paradigm has occurred without addressing the relationship of broadcasting policy to the processes of transition to or consolidation of democracy in developing countries. Such issues as freedom of expression, fairness of broadcast stations to political parties during election periods and the balance between public, private and community broadcasters have not been addressed adequately in ICT policy. Public broadcasting services depend on notions of providing information and culture to citizens without the intervention of market factors in shaping that information or culture for commercial purposes. Community broadcasting services depend on their relationship with particular communities that are similarly not mediated by commercial interests or the government. Important values related to democracy, freedom of expression, citizenship and community are involved in these forms of broadcasting which cannot simply be reduced to the notion of ICTs. Such values need to be re-balanced in the new layered framework and carefully distinguished from purely commercial values.

Access to ICTs as a Technical Issue in WSIS

The WSIS Plan of Action emphasizes access to ICTs as a key priority and sets a number of access targets. Connecting ICTs to villages, health clinics, schools and

¹² International Telecommunication Union: World Telecommunication Report – Reinventing Telecoms, 2002, p51

¹³ See Lawrence Lessig: Code and Other Laws of Cyberspace, Basic Books, 1999, p24

libraries can appear to be a simple and purely technical question but on closer analysis ICT access is primarily a social question – a socio-technical interface between human beings and technology. WSIS's stress on public-private partnerships as the primary way of increasing access to ICTs in the WSIS Plan of Action suggests that the private sector will drive ICT access whether by way of universal service incentives or obligations to rollout ICT infrastructure beyond the limits of market viability. The private sector will tend to see these targets on a quantitative basis of rollout targets of new lines and will not necessarily have the incentive to undertake the human capacity requirements to make such connections effective for development purposes.

For example, simply connecting the internet to a school does not take account of whether any of the teachers know how to use the technology for educational purposes. Questions of the security of the equipment from theft will need to be addressed. A computer laboratory may need to be set up in a dedicated classroom. Questions may arise as to whether there are any applications in the language of the school students. The WSIS Plan of Action tends to have an instrumental approach to ICT access which does not take into account the divide between those who are able to use technologies for development purposes and those who lack the capacity.

The rollout of ICTs needs to be accompanied by capacity-building so that people in villages or nurses in clinics know how to use ICTs and it will also require appropriate local content and applications to make use of the internet meaningful to local conditions. The Markle Foundation put it this way: 'If the problem of the "digital divide" is defined as a problem of technology or infrastructure scarcity in the developing countries, it is all too easy to slip into the erroneous assumption that simply introducing these technologies – without addressing other major elements of the development equation – will produce development consequences.'¹⁴

Related to this technical approach is that 'elements and priorities of national ICT strategies might differ between developed and developing countries'.¹⁵ Priorities in developing countries may emphasize basic telecoms and access to the Internet while developed countries may be more concerned with privacy, broadband networks and intellectual property rights (see figure 2). This represents a strategy divide between developed and developing countries which needs to be taken into account when global priorities are created in international for a such as WSIS. From the perspective of developing countries, the emphasis on infrastructure and technical access to ICTs may seem the logical and primary goal while issues of privacy, communication rights or intellectual property rights appear secondary and less of a priority. This poses a particular challenge to civil society organizations to engage governments of developing countries to explain why ICT policy should be engaged from a holistic perspective at the same time that basic access is addressed.

The Association of Progressive Communications' (APC) comments on Zambia's draft National Information and Communication Technology Policy is a good example of the way civil society can engage governments on over-emphasizing infrastructure questions and technical solutions to ICT access. APC criticizes the Zambian policy on the basis that it "seems to dive straight into infrastructure focused issues with little mention or concern for wider policy issues that have a relationship with ICTs. For

¹⁴ Frederick S Tipson and Claudia Fritelli: Global Digital Opportunities – National Strategies of "ICT for Development" Markle Foundation, 2003, p 7

¹⁵ UNCTAD: E-Commerce and Development Report 2003, p66

example, issues such as content development, privacy and surveillance, communication rights and intellectual 'property'."¹⁶

The tendency towards technical solutions to bridging the digital divide contains a risk that the focus in developing countries on extending ICT infrastructure to underserved areas will ignore other key ICT policy issues and values in addition to not taking questions of human capacity into account.

Regional E-Strategies

The new layered framework recognizes that ICTs are not limited by borders. If e-strategies limit themselves to national approaches as suggested by WSIS, it is likely that the process of building access to ICTs will be very slow when it comes to the utilization of cross border technologies such as VSAT to carry internet traffic. Hence it will be important that regional e-strategies are undertaken that can talk to national e-strategies and simultaneously address regional communications policy, financing and regulatory issues in a way that promotes harmonization. Unfortunately, regional levels of organization in developing countries tend to be based on weak structures that are under-resourced and poorly co-ordinated. The Catalysing Access to the Internet in Africa (CATIA) project is an example of an NGO-led attempt to promote the use of satellite for internet access across national boundaries in Africa. Based on an EU model of a one-stop shop for satellite service providers to obtain licenses from a number of national Regulatory Authorities simultaneously, the CATIA project illustrates the complexity and the need for developing regional e-strategies in order to enhance access to ICTs in developing countries.¹⁷

Civil society organizations can make a case for the development of regional e-strategies to co-ordinate access to ICTs and the implementation of the WSIS Plan of Action at the supra-national level in regional entities such as the Southern African Development Community (SADC), MERCOSUR or the Association of Southeast Asian Nations (ASEAN). Regional e-strategies can take a lead from the EU's process of building the Information Society at a regional level and need not reinvent all the elements required for successful regional co-operation and policy harmonization.

Implications for E-Strategies

What role can civil society organizations then play in making e-strategies progressive instruments of ICT policy?

First, civil society organizations can argue for convergence to be fully addressed in e-strategies. At the physical level, the framework is not concerned with whether a network is fixed or mobile, carried by fiber-optic cable or satellite. The old sectoral framework was over-concerned with these distinctions and if they are allowed to carry over into e-strategies, the legacy of telecom systems will inhibit the development of the infrastructure needed to provide universal access to ICTs on the scale demanded by the WSIS Plan of Action. Hence e-strategies should be network-neutral at the physical layer. Licensing restrictions on the technological type of networks an operator may deploy should be removed. A fixed network should be able to use mobile and vice versa. A satellite network should be able to use a fixed

¹⁶ APC Comments on the First Draft National ICT Policy for Zambia: 'Chakula' Newsletter Issue No 9, April 2004, p26

¹⁷ See www.catia.ws

line return path if it so pleases. If an internet service provider wishes to deploy a wireless network that should be fine.

Second, at the logical layer, civil society organizations should argue for distinctions between voice and data to be removed. Digitalization of signals has long ago made the distinction technologically meaningless but it persists as a matter of policy and law. If an internet service provider wishes to use Voice over Internet Protocol, this should be permitted and should not be subject to the old monopoly control of a moribund fixed line operator.

Third, at the content layer, civil society organizations should find innovative ways to increase the availability of local content in developing countries and to challenge attempts to bring audio-visual content under the jurisdiction of the World Trade Organization's trade regime. Global flows of US content and software need to be counter-balanced with the support and subsidization of local content in developing countries.

Fourth, civil society organizations need to place pressure on governments to support appropriate human capacity-building at all levels of ICT utilization, within the education system, in business and in broader communities and to locate implementable programs within e-strategies.

Fifth, civil society organizations need to debate the way in which e-strategies can rebalance and articulate the values and rights connected to the use of ICTs in all information societies. How do rights regarding the free flow of information and the freedom to communicate and have access to information balance with rights to culture, language and local content. How is the freedom to communicate in one's own language over ICTs to be protected in an era of globalization? How can such collective rights to culture be advanced against the pressures of extinction or appropriation by multi-national companies? How can rights to privacy, security of communication and data protection be asserted against corporate freedom of expression over ICTs?

The Value of Civil Society Engagement with E-Strategies

The engagement of civil society organizations with e-strategies also requires some appraisal of what civil society brings to table in the process of implementing the WSIS Plan of Action: what specific value do civil society organizations bring to bear?

Without being overly prescriptive, civil society seems positioned best to advance a development and human rights agenda for ICTs. Such an agenda would draw on civil society concerns with values and rights that are not dominated by concerns of governance and profitability and to bring these to bear in a number of ways:

- ?? Mobilizing and building capacity among grassroots communities to promote ICT for development;
- ?? Participating in ICT policy making at national, regional and global levels;
- ?? Monitoring government and private sector implementation of e-strategies;
- ?? Advocating a human rights approach to ICT for development.

Such a role needs to be tempered with a certain pragmatism and a knowledge of the practical uses of ICTs as technology and of the complexity of the shift to a new layered policy framework where no one has the monopoly on answers.

Towards a Global E-Strategy

As the impact of the first phase of WSIS is assessed and the road to Tunis takes shape at various preparatory conferences, it may be worth considering whether progressive civil society organizations and governments should table a global e-strategy at WSIS2 at Tunis in November 2005.

This paper has argued that e-strategies have the potential to be important policy instruments of ICT for development and have been positioned centrally within the WSIS Plan of Action as the means for reaching the ICT access targets required by 2015. E-strategies currently also have certain limitations which a global e-strategy would have to acknowledge and address:

- ?? They have not fully integrated the shift from the sectoral to the layered ICT policy framework resulting from the growth of the internet, convergence and digitalization;
- ?? They have not dealt adequately with the reality of the sectoral reforms of the telecoms and broadcasting industries of the 1990s which have created a legacy of systems that are still dominant in most information societies;
- ?? They over-emphasize the technical deployment of ICT infrastructure over the social dynamics of development, ICT policy issues and human capacity;
- ?? They do not address the importance of regional ICT co-operation in addition to the national level;
- ?? They do not foreground questions of values and rights adequately.

A process led by progressive civil society organizations in consultation with the governments of progressive developing countries could debate these limitations of e-strategies and reach consensus on a new framework for e-strategies that addresses ICT, human rights and development holistically. Such a global e-strategy could also incorporate the issues regarding the financing of the ICT access targets in the WSIS Plan of Action as well as the social goals of ICT for development that need to be costed as part of the implementation process.

The recent agreement between the governments of India, Brazil and South Africa to co-operate on a broad range of issues after the failure of the Doha trade round at Cancun could be extended to include producing a global e-strategy for WSIS 2. The three governments could work co-operatively with a number of leading ICT civil society organizations based in developing countries to formulate the global e-strategy. They could subject it to a number of reality tests, before it is presented for negotiation in the WSIS 2 process.

Whatever happens at WSIS 2 in Tunis in 2005, it is vital that civil society organizations take the issue of e-strategies seriously. E-strategies, however imperfect they may be a policy instruments, represent a tangible outcome of the WSIS process. A progressive approach to e-strategies can provide a way of bringing the full range of ICT policy issues and stakeholders to bear on fashioning the future shape of information societies in developing countries.