



Key Questions and Issues for Ministers' Roundtable
Asian Forum on ICT Policies and e-Strategies
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by

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The following questions were framed for discussion at the Ministers' Roundtable which initiated the Forum. Active interventions by Ministers and Heads of Delegations on the key issues and questions provided a rich collection of ideas that are incorporated in the report of the Forum.

1.0 Research clearly indicates a correlation between ICT development and economic development, but is not conclusive on the direction of causality. Government promotion of investments in ICTs in developing countries assumes that ICTs contribute to economic growth, and that it is not necessary to wait for economic growth to drive consumption of ICTs and ICT-enabled services. How have the Ministers dealt with the inconclusive evidence of ICT causing economic development in promoting ICT investments?

Sustainable ICT development requires that users of ICTs and ICT-enabled services are capable of paying for them. When one introduces ICTs prior to the disposable incomes of potential users reaching a certain level it becomes necessary to provide subsidies in various forms. Unless the use of ICTs and ICT-enabled services increases the disposable incomes of the users quickly, sustainability can become a serious problem. In Sri Lanka, the government has taken a considered decision to promote ICTs and ICT-enabled services under the *e Sri Lanka* Initiative knowing that the targeted user groups cannot pay the economic costs of the provided services. The *eSL* Initiative is premised on the increase of the disposable incomes of its beneficiaries within the five year life of the Initiative. All programs under *eSL* are therefore focused on creating employment opportunities for users and facilitating wealth creation opportunities for participating enterprises. This is, however, a risk that the government of Sri Lanka is taking. It would be interesting to share the thinking of Ministers on this subject.

2.0 Critics of major government expenditures on ICTs claim that ICTs will benefit only the already privileged groups in society, not the truly impoverished. How have the Ministers responded to this criticism?

2.1 A subsidiary argument is that ICTs will exacerbate the existing differentials in power among groups in society.

2.2 A different form of the above argument posits the beneficiaries of ICTs as urban dwellers, and the rural dwellers as either the non-beneficiaries or the victims of greater power accumulation in urban centers.

Effective use of ICTs require a range of endowments: the financial wherewithal to pay for connectivity, hardware and services; the educational background to use the services, including English language skills; endowments of capital in various forms to convert the opportunities identified through ICT enabled services into wealth creation. For example, e-commerce cannot benefit an agricultural producer who does not have access to agri-price and market opportunity information through real-time access to the Internet and services thereon. Even if such a producer were to have the required access, the optimal utilization of the opportunities will generally require investments in capacity and organization to engage in e commerce.

The critics contend that only the currently privileged groups will in fact benefit from ICT promotions in that they are the only ones capable of converting opportunity into benefits. Proponents of the thesis of differential benefits to urban/rural dwellers claim that ICT promotion will deepen the gap between these geographically defined groups. Some will go even further to argue that ICTs will further exacerbate power differentials, such as in the case of mobile phones increasing the negotiating power of shore-based buyers against fishermen. Effective design of ICT promotion efforts must address these concerns in some form. The metaphor of a tide that will raise all boats is, by itself, inadequate. Countries that have relatively higher penetration of ICTs may present evidence of effects across different socio-economic groups. Countries that are in the process of designing ICT promotion programs may wish to share the design elements addressing these concerns and/or discuss how they would meet the above criticisms in the political arena.

3.0 ICTs cut across conventional boundaries, such as those demarcating Ministerial authority. What practical steps have been taken in each of the countries to reduce the resultant frictions and manage ICT projects effectively?

3.1 ICTs cut across operational boundaries between International Government Organizations (IGOs), and even sector/division boundaries within them. This can result in rivalry, duplication, and various forms of unproductive bureaucratic behaviors by different government entities backed by different IGOs or different units of IGOs. How can the leaderships of the IGOs assist the Ministers minimize the negative effects, while ensuring healthy competition of ideas?

ICTs do not correspond to existing organizational definitions, within or outside government. Anything that goes beyond telecommunications infrastructure tends to involve a plethora of other entities. For example, e government cannot be implemented without the direct participation of the Ministry of Public Administration or equivalent and, in fact, all government organizations. The creation of a legal environment for ICT-enabled services requires the cooperation of the Ministry of Justice or equivalent and pretty much the entire police and judicial machinery. Many countries try to address the overlap problems through the creation of inter-Ministerial committees, which are unfortunately prone to delay and lowest common denominator decision making. Others have tried to back ICT implementation agencies with the authority of the chief executive of the government. Sharing of experiences on how best to manage this problem would be of significant value for the Ministers.

4.0 Research shows that ICT is most efficacious when used in conjunction with other inputs; that it is a necessary but not sufficient condition for the solution or alleviation of problems such as HIV/AIDS that are set out as Millennium Development Goals (MDGs). In relation to each of the MDGs, would the Ministers wish to elaborate on how ICT has been used in conjunction with other inputs?

The MDGs can be summed up as follows:

- eradication of poverty;
- universal primary education;
- gender equality and empowerment of women
- reduction of child mortality
- improvement of maternal health
- the fight against major diseases such as AIDS and malaria
- the promotion of sustainable environment
- the development of a global partnership for development

As can be seen, the majority have health and education outcomes as objectives and require the mobilization of several kinds of non-information and communication inputs; they cannot be achieved solely by ICTs and ICT-enabled services. On the other hand, research shows that the inputs provided through ICTs can multiply the effects of other inputs. Effective mobilization of ICTs in support of MDGs, therefore, requires the coordination of resource inputs, necessitating cooperation among different Ministries and sectors. The sharing of experiences and approaches by the Ministers can be very useful.

5.0 *How can gender concerns in ICTs be best addressed? Through quotas and assured representation on policy-making bodies, or through aggressive action to feed the pipeline in the form of efforts to increase participation of women in ICT entrepreneurship, education and training? Is it necessary to ensure adequate gender representation in ICT policy implementation bodies as well?*

It may be generally agreed that ICT policies need to be gender-sensitive, especially in the context of economies with significant female participation. Because of the general lack of women in senior policy and industry positions, it is not always easy to ensure female participation in ICT policy making. There can also be gender bias in ICT policy implementation. Given the importance of policy implementation, one may be tempted to select key implementation personnel strictly on the basis of merit, which could perpetuate gender bias. Can the Ministers address these questions based on experience?

6.0 *It is well known that the World Wide Web is dominated by content in English, followed at some distance by major European languages and Chinese. The indigenous languages of most Asian countries are, therefore, underrepresented on the Web. The dominance of English has led some to claim that English competence is a pre-requisite of effective ICT use. What actions have the Ministers considered/taken in relation to the language of the Web? Putting resources into improving English education, possibly using ICTs as a tool? Promoting the production of web content in local languages? Promoting browsers and other search tools that would privilege local content?*

6.1 *What specific policy actions have been taken or are considered necessary to enable the easy use of indigenous scripts in ICT applications? Are the Asian nations that use Roman script and Arabic numerals at an advantage over those who do not?*

Issues of linguistic representation have accompanied the introduction of all new media forms. Identity, which is seen as closely tied to domestic content in local languages, is seen as threatened by foreign content and international languages. Unlike the previous electronic media that for the most part recognized some forms of distance-based distinction (e.g., local TV available with smaller and cheaper antenna than satellite TV), the ease of accessing domestic content is the same as that for foreign content on the Internet. Given the necessity of using various forms of search and retrieval tools such as browsers, the local content in indigenous languages may

be even “further away” than international content (e.g., local content in non-standardized script or PDF form does not get picked up by popular browsers). The conventional media policy tools of quotas for domestic content are irrelevant on the Web. It would be of great value to have the views of the Ministers on specific policy actions they have taken to address the language/local content issues.

7.0 ICTs (networking technologies, IT hardware and software) are subject to rapid change and are generally produced in a few centers (that themselves are subject to change) across the world. Examples are the current concentration of Open Source software development workers in the West Coast of the United States, R&D on mobile communication in Finland and the United States, etc. How can countries obtain the best ICTs, without exacerbating their trade imbalances? Is it possible to ignore issues of manufacturing job creation and the promotion of R&D and exports by ICT firms in the formulation and implementation of ICT policies? Even if Ministers wish to ensure greater local participation and production, do their WTO commitments allow them to do so?

State subsidized efforts to promote ICT industry growth through “industrial policy” have not generally been successful, a recent example being Japan’s push to become the leader in Fifth Generation computing. Efforts such as Malaysia’s Multimedia Super Corridor are less directive and less subsidy driven. Other countries, especially small economies with significant trade dependency, have for the most part conceded the need to import ICTs given their lack of economies of scale and appropriate human resources. While market interventions have worked in manufacturing, the uncertainties that affect the ICT industries made it very difficult for slow-moving governments to effectively intervene in and redirect ICT industries.

The liberal economic paradigm, which underlies the WTO, GATT and GATS, frowns on mercantilist interventions. Have the countries represented at the Forum made the requisite reservations to their GATS commitments to make mercantilist interventions possible? If they are unbound in terms of GATS commitments, are they constrained by bilateral or regional trade agreements? Or do they agree with the liberal economic paradigm?

8.0 Countrywide deployment of ICT enabled services requires a countrywide broadband or at least a countrywide telecommunications network. How have

countries represented at the Forum sought to address this problem: By the government building and operating specialized data networks? By inducing private operators to build and operate specialized networks?

8.1 Given the success of market liberalization, including the introduction of competition and privatization of government-owned incumbents, in increasing connectivity, it has been argued that liberalization with the establishment of independent regulation is more than adequate for the provision of communications capacity. The proponents of this view see the re-entry of government into direct supply or the wide use of direct or cross-subsidies to be inimical to the effective operation of market incentives. Have the Ministers had any experience in grappling with liberalization/government provision/subsidy choices in the context of broadband rollout?

Countries other than the United States and the Philippines have extensive experience with government provision of telecommunications services. Generally speaking, this experience was not a very happy one and a majority of the world's countries have engaged in some form of privatization and introduction of competition to improve sector performance. The question of how to ensure the build-out of broadband capacity has seen the re-emergence of the government versus private provision issue. The government of Andhra Pradesh, well known for its IT promotion activities, has chosen the path of government provision. Sri Lanka has announced its intention to use least-cost subsidy auctions to provide incentives to the private sector to build out broadband capacity in underserved areas. A discussion of the various options, including public-private partnerships at various points in the policy continuum is seen to be of benefit.

9.0 In light of high costs of providing connectivity and software to low-income users, there has been considerable interest among developing country governments in the potential of low-cost communications equipment operating on unlicensed WiFi bands and in open source software. What are the views of the Ministers on the use of these technologies and the policy/regulatory actions that are necessary to enable their use?

In technological fields, there is always the hope of a radical technology on the horizon that will transform the economics of supply. The current candidates in telecom and IT are WiFi and open source (with perhaps distributed computing as a

close contender). The early developments in both fields that were outside the market (community access provided by volunteers in the case of WiFi and “shareware” thinking associated with Richard Stallman in the case of open source) led to hopes that they could be mobilized at very low to no cost for use in developing countries. Recognition that someone must pay for services has tempered this thinking to some extent in recent times. It will be useful to discuss the commercial and non-commercial variants of service-supply models using WiFi and open source.

A related discussion pertains to government actions necessary to enable or promote these “alternative” technologies. For example, full utilization of the potential of WiFi requires governments/regulatory authorities to unregulate the 2.4 GHz and 5.8 GHz bands and to clear them of non-WiFi users. In some countries this requires amendment of legislation. It would be useful to share experiences of government actions in this regard.

10.0 Successful implementation of e commerce and e-government requires that the users of these services have trust in the systems they use. Prevention of unauthorized intervention in e-commerce and e-government transactions, ensuring that the parties to the transactions are properly authenticated, and providing guarantees that information yielded for one purpose is not used for different purposes are key to building trust. What actions have been taken, or are being considered, by governments represented at the Forum in these three areas? How have the governments balanced the need for trust by users with the imperatives of policing illegal behaviors on the web?

There is considerable research that supports the necessity of creating an environment of trust to ensure optimal use of e-commerce and e-government services. Common sense suggests that sending tax inspectors to pursue persons who have accessed a government tax information website will discourage use and that credit card transactions on the web are likely to be reduced if there is a high probability of leakage of transaction-generated information to third parties. Governments worldwide have taken actions ranging from the enactment of data protection and privacy legislation to the encouraging of private sector self-regulatory initiatives such as Trust-e. These actions have, however, been tempered by the wishes of law enforcement authorities to maintain or enhance their investigative abilities, especially in light of the current concerns about terrorism. Debate and discussion on the appropriate balances to be struck will be most appropriate.

11.0 *Should ICT policies and e-strategies include specific reference to implementation?*

Implementation is critically important. Without monitoring, enforcement of schedules and deliverables, and evaluation, policies and strategies would remain dead letters. Implementation must be built into all policy and strategy activities in the ICT for development area.

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