June 12, 2014

Secretary-General Hamadoun Touré, Chair United Nations Group on the Information Society (UNGIS) Other Agency Members of UNGIS and Participants at the WSIS+10 Review High Level Event ITU Headquarters, Geneva, Switzerland

Dear Secretary-General Touré, UNGIS members and other participants and observers of the 2014 WSIS+10 Review:

We are writing to note our concerns regarding the WSIS+10 Review, since the process has not admitted critical contributions in the last two months, including the inputs of Seth Johnson, who sought to take part in the WSIS+10 Review beginning in March. While he was eventually accredited for the May MPP and the High Level Event meeting of this week, his submitted comments have not been admitted into the process.

Seth's contributions describe how the usage of key terms at the heart of the WSIS project often work against its own goals as expressed in the Action Lines. A candid review of the WSIS project must take this type of input into account, and these concerns should be understood in the next phases of the project, as the UN considers the course the project will take after this year.

Seth identifies new priorities for the project based on its tendency to encourage confusion of specialized services with the open Internet, its working to implement a form of interoperability based on conformance with policy without recognizing the maximal form of interoperability already established between networks through the Internet protocol, and its supporting vertically integrated telecommunications environments while not adequately recognizing the role of competitive access at the physical layer in supporting the open Internet. He focuses on listing the numerous ways in which these aspects of the project impact the Action Lines, including effects in important areas of concern such as empowerment, digital inclusion and capacity building; development, competition and the enabling environment; openness, flexibility and innovation; governance and cybersecurity; rights; and other areas.

We restate Seth's comments below, in the form of an open letter to the UN GIS and the broader community of WSIS project participants, placing his comments under useful headings and adding a few more comments based on his analysis of the performance measures that the WSIS project is using to quantify its progress. We believe that future plans for the WSIS project should reflect these considerations.

The following paragraphs relate to the questions in the "Form 1" submission form that participants in the WSIS+10 Review used for their initial contributions to the process, and we have tagged each paragraph with the numeric codes that correlate with the relevant questions from that form.

## Recommendations

**Key Challenge:** We recommend that the WSIS project act to secure the open Internet by incorporating means for recognizing impacts on the Internet's key characteristics as it proceeds to facilitate the implementation of ICTs. (b1b)

<u>Vision for Disadvantaged Groups</u>: As a vision for addressing the needs of disadvantaged groups, we recommend that the project assure that the way the Internet empowers end users and independent providers be secured by a process that incorporates recognition of the Internet's key characteristics. (blc)

**Priority Implementation Issue:** We recommend that the project pursue the establishing of common understanding of key characteristics of the Internet in order to set up systems to recognize impacts on its basic nature and advantages. (b2c)

**Improving Monitoring and Evaluation:** We recommend that monitoring and evaluation be improved by implementing performance measures that reflect the distinction between open Internet and specialized services. (b3a)

**New Priorities and Objectives:** Our review of the WSIS project reveals critical areas for new priorities and objectives in relation to 1) Action Line C2 (IC Infrastructure), wherein the project is acting to replace open Internet with specialized service networks without recognizing the difference; 2) in Action Line C5 (Confidence and Security in ICTs), wherein the project is working to achieve confidence on the basis of interoperability based on conformance with policy without acknowledging the profound degree of confidence that has already been achieved through the maximally flexible, general purpose form of technical interoperability made possible across networks by the Internet Protocol; and 3) in Action Line C6 (Enabling Environment), wherein the project is framed in terms consistent with policy environments that support vertically integrated telecommunications contexts without recognizing that environments that support competitive access to physical layer infrastructure enable a context of competing and autonomous networks interoperating among themselves to arise. (b2a2, b2a5, b2a6)

**Priority Focuses, Goals and Targets:** The priority focuses, goals and targets we recommend for the WSIS project reflect the above new priorities: 1) identify modalities for coexistence of open Internet with specialized services, assuring the two are not conflated; 2) before proceeding to operate under a general principle of "Internet Universality" such as UNESCO recommends, first incorporate recognition of two types of interoperability into the project: interoperability in the sense of conformance with common policy, whether within or across networks, and interoperability in the sense of technical, general purpose interoperability that the Internet Protocol already makes possible between networks; and 3) address the enabling environment with explicit recognition of competitive access to physical layer

infrastructure in addition to policy contexts that support vertically integrated telecommunications environments. (b3b)

## Observations

We observe as a special comment that in general the WSIS project encourages a confusion of the Internet with IP-based networks in general, and it therefore enables a movement toward implementing networks to support ICTs that may establish practices and policies which may have adverse impacts on the openness, flexibility and neutrality that arise naturally in an Internet platform made up of competing and interoperating autonomous networks. (b4)

The following paragraphs enumerate trends that arise in relation to the Action Lines as a result of the WSIS project's failure to distinguish the Internet from other types of IP-based networks.

#### Empowerment, Digital Inclusion, Capacity Building:

If the difference is not recognized between what the open Internet platform that arises among interoperating autonomous providers makes possible, and the capacity for specialized services that individual providers may implement within their own networks, then the outcome of the Information Society project may easily be to supplant the type of empowerment and digital inclusion that the Internet is designed to bring, replacing it with narrower options that other types of connectivity may entail, with pervasive effects on Action Lines C2, C3, C4, C8 and C11. (b2b2, b2b3, b2b4, b2b8, b2b15, b2b18)

Failing to recognize the empowerment of end users and of independent providers made possible by open Internet connectivity will lead to overlooking of effects on selfdetermination, autonomy and independence of communities such as the young people, women and girls, nomadic and indigenous peoples, and communities residing in rural and underserved regions which Action Line C4 references, or of the older population, persons with disabilities, children and other disadvantaged groups referenced by Action Line C2. (b2b2, b2b4)

The empowerment of end users made possible by an open Internet platform made up of autonomous providers interoperating among themselves is of a different character from that which managed service frameworks enable within their individual networks, and from that which may be expected in vertically integrated telecommunications regimes such as we find in the United States. The types of ICT applications that would be developed in all the categories covered by Action Line C7 if they are not based on the open platform would reflect this same difference in empowerment, and indeed end users would be less able to freely develop these applications themselves. This concern also relates to the nature of the national, regional and international "broadband network" infrastructure that Action Line C2 advocates pursuing as the "essential foundation" for digital inclusion in the Information Society. (b2b2, b2b7, b2b8, b2b9, b2b10, b2b11, b2b12, b2b13, b2b14)

Conceptions of network types implied in Information Society initiatives will affect access to information, cultural identity and diversity, and international cooperation as envisioned by Action Lines C3, C8 and C11. (b2b3, b2b15, b2b18)

These conceptions will affect the extent of empowerment that would apply toward the calls in Action Line C8 to promote the production of cultural works and local cultural industries, local community media, local heritage and biological diversity, support for rural and isolated communities, and local development for disadvantaged, vulnerable, non-literate and disabled communities. (b2b15)

They will also affect the kinds of best practices that would be recognized for promoting cultural and linguistic diversity and the ways in which the capacity for indigenous peoples to develop works in their language would be enhanced as advocated by Action Line C8. And the role of diverse, local communities could be altered as the public/private partnerships to promote cultural diversity, local and national works, and "ICT-based works" that C8 encourages, interact with policy and regulatory contexts associated with network infrastructure, potentially producing new formulations of the role of the government and private parties and of the nature of the telecommunications regime. (b2b15)

The nature of the network will affect the content of the programmes for capacity building, lifelong learning and universal education, including the substance of courses in public administration, the nature of the qualifications of ICT experts, and the role to be played by the libraries, multipurpose community centers, local ICT training centers, and public access points advocated by Action Line C4. Conceptions of the network will also have impacts on Action Line C7's promotion of e-learning and e-science in relation to qualifications of ICT experts, accessibility and affordability of scientific information, the effective use of scientific information, and the role of universities and research institutions. (b2b4, b2b9, b2b14)

### Development, Competition, the Enabling Environment:

A failure to recognize the characteristics of the Internet in the Information Society's initiatives will affect the goals of building confidence and security in relation to the enabling environment for development as called for by Action Line C6, given that understandings of what constitutes a pro-competitive policy, legal and regulatory context, and what appropriate incentives are, may reflect the characteristics of other types of networks. (b2b6)

This includes the types of national policies for promoting investment in infrastructure and new services called for in Action Line C2, notably the incentivizing of infrastructure investment by treating privileged access to the physical layer as a "supply" vertically

integrated with the production processes of higher layer services offered by telecommunications incumbents, or the defining of policy frameworks associated with the term "broadband." These approaches may enable various forms of price differentiation or tiers of service that can be readily implemented within individual intranets, but not across autonomous internetworking providers. (b2b2)

The types of commercially negotiated transit and interconnection arrangements for global connectivity that Action Line C2 urges pursuing could supplant the unique strengths and advantages of the Internet if its characteristics are not delineated, and the advocating of "objective, transparent and non-discriminatory parameters" for connectivity in Action Line C2 could serve to replace recognition of how the basis of the Internet in competitive interoperation among independent providers can serve inclusivity by assuring the openness of the platform is maintained by competitive pressure. (b2b2)

Action Line C7 seeks to support sustainable development and diverse applications for public administration, business and numerous areas of life that may be benefited by the Information Society. If policies for promoting development of infrastructure and services are based on vertical integration, this may support the sustainability of that type of network, but it will not sustain the open Internet. End users would be less able to freely develop applications themselves in a managed service network or a vertically integrated telecommunications context, and the diversity of types of ICT applications that would be developed and supported in all the Action Line C7 categories would be adversely affected if they are not based on an open platform. (b2b7, b2b8, b2b9, b2b10, b2b11, b2b12, b2b13, b2b14)

The effects on e-business and e-employment in terms of economic growth, opportunities, productivity, well-being, poverty, international trade, investment and innovation, and assistance to SMEs, as called for under Action Line C7, will vary depending on the flexibility and openness of the network. (b2b8, b2b11)

Failing to recognize the nature of the Internet could affect not only the type of connectivity that would be made available in service of Action Line C11's calls for universal access and bridging of the digital divide, and for international cooperation on infrastructure development projects, but also the nature of the public-private partnerships also called for by Action Line C11. In policy and regulatory contexts that do not promote competitive access to the physical layer, as we find in contexts that maintain vertically integrated telecommunications environments, the promotion of public-private partnerships can tend to entrench that pattern if those arrangements do not incorporate appropriate recognition of the role of public oversight of shared physical layer infrastructure. (b2b18)

### **Openness**, Flexibility, Innovation:

The openness and flexibility of the Internet platform is supported by competitive access at the physical layer, since competing providers must transmit packets in a general purpose manner in order to interoperate and provide global connectivity to their users. As a result our confidence that the platform will support our ability to innovate can be affected deleteriously if other types of networks are employed to serve public security purposes through a core authority without recognizing the impact those means would have on the Internet. (b2b5, b2b6)

Some types of incentives for infrastructure development may be built on capacities made possible in managed service frameworks (such as discrete tiers of service allowing differentiated price schemes), or that may be enabled by a regulatory environment that allows incumbents to treat the infrastructure they install at the physical layer as a private asset supplying a vertically integrated production process. Our confidence that the platform will support innovation can be undermined in contexts driven by these approaches to encouraging development, which are distinct in nature from an approach based on an Internet platform among autonomous providers who drive demand for buildout through independent innovation in services as they compete and interoperate at the physical layer. (b2b6)

Policies associated with document identifiers and electronic authentication of transactions can interfere with the openness and flexibility of the Internet platform if their impacts on its collaborative and interactive attributes are not properly appreciated. (b2b5)

### Governance and Cybersecurity:

A failure to address the nature of the Internet as distinct from other types of networks supporting specialized treatment of packets will have impacts on concerns related to governance under Action Line C6 including how we define internet governance, public policy issues, and roles and responsibilities of various parties, how various technology policies relate to national strategies for public administration, and the effect of enforcement of e-commerce, online transactions and policies on the dynamic, interactive and collaborative capacities of the open Internet. (b2b6)

Failing to recognize the Internet's special characteristics would also affect how connectivity would work as the "fundamental working tool" for local governance that Action Line C3 recommends recognizing. (b2b3)

In the context of e-government under Action Line C7, transparency, accountability and efficiency are served most reliably by a competitive telecommunications environment populated by independent providers who will agitate for accountability when their ability

to use the Internet platform in the maximally flexible way it was designed for is impeded. Accountability also relates to the relationship between a government and its people, within the context of which people's rights are defined, and a competitive telecommunications environment supports effective forms of accountability in relation to rights as well as in relation to the flexibility of the platform. (b2b7)

Failing to recognize the unique characteristics of the Internet will also affect what comes to be understood as cybercrime and misuse of ICTs in the context of Action Line C5, and what confidence and security mean, both in terms of government enforcement of policy to prevent crime or harm, and in terms of how well we may rely on fundamental liberties as limits on government actions in the name of cybersecurity. It will also affect understandings of the implications of centralized or decentralized approaches to cybersecurity concerns including areas such as spam and the nature of the roles of the government and of network providers in many areas including real-time incident response. Policies and approaches may easily be of a type only enforceable within centrally-managed intranet environments, and in the international context they may not be as well subject to the claims of fundamental liberties as they are in free national contexts. Policies associated with document identifiers and electronic authentication of transactions, also referenced in the cybersecurity context, can interfere with the openness and flexibility of the Internet platform if those attributes are not explicitly acknowledged and confronted. (b2b5)

#### Rights:

Like the effect on our confidence that the platform will support innovation in the contexts of Action Lines C5 and C6, overlooking the nature of the Internet will also affect our confidence that the platform will support freedoms of speech, press and association, as well as the right to be secure against unreasonable searches. Not only are these rights exercised more freely on an open and flexible Internet platform among autonomous and interoperating providers, but a vertically integrated telecommunications context works to the detriment of securing rights as limits on the government. (b2b5, b2b6)

If the telecommunications environment is vertically integrated, the implication is that infrastructure will be treated as a private asset of those who install it across the right of way, and as a result fundamental liberties related to the communications of citizens, understood as limits on the government, may be characterized as inapplicable. Indeed in that framework oversight of public franchise entities and common carriers in the form of regulation of infrastructure might be characterized as a violation of the rights of those who installed the infrastructure, rather than as a natural reflection of the nature of the right of way as a resource that must be governed to oversee access and foster competition. A context that regulates infrastructure in these terms recognizes this oversight more readily as a government function, which is thus directly barred from abridging the fundamental liberties of the general public, and incumbents in such a context naturally may incur obligations, including limitations that reflect those that apply to the government, in connection with their administration of a public franchise and privileged access to right of way. So security in the sense of reliable support for fundamental liberties may be affected when the foundation of the Internet in competitive access at the physical layer is overlooked, and infrastructure is instead treated as private assets vertically integrated with the products and services of incumbent providers. (b2b5, b2b6)

A failure to acknowledge the characteristics of the Internet will also affect the goals of promoting rights to privacy, data and consumer protection referenced in Action Lines C5 and C6. The conflicting understanding of the roles of public oversight and private parties derived from the telecommunications policy and regulatory environment as described above, can affect the nature of user education regarding privacy online, and of the initiatives and guidelines for rights of privacy, data and consumer protection encouraged by Action Lines C5 and C6. (b2b5, b2b6)

### Other Trends:

The Information Society's failure to distinguish the open Internet from specialized service networks will also have other implications for the WSIS Action Lines.

It will affect the type of connectivity that would be established for schools, universities, health institutions, libraries, post offices, community centers, museums, and other public institutions according to the call in Action Line C2, and the nature of the pilot networking projects among education, training and research institutions between developing and developed countries, and in fact the very kinds of ICTs that would be recognized as appropriate for integration into education and training, referenced by Action Line C4. It will also affect the kind of connectivity that would be made available for international cooperation on infrastructure development projects as called for in Action line C11. (b2b2, b2b4, b2b18)

It will affect the types of educational, administrative and legislative measures to serve various disadvantaged groups, and indeed the type of end user equipment, that Action Line C2 encourages promoting. And it would affect the universal access policies and strategies and connectivity indicators, systems standards, technical, regulatory and operational studies in public/private partnerships, as well as access to orbital resources, satellite for underserved areas, and frequency harmonization advocated by Action Line C2. (b2b2)

It will affect types of information made available, what would count as public domain, the forms of use and sharing of information that would be supported, whether technically or by policy, the kinds of exclusive rights that would apply in the context of the capabilities of the technology, and the roles that would be played by multi-purpose community public access points, all referenced by Action Line C3. (b2b3)

It will affect the open, interoperable, non-discriminatory standards, and the nature of the secure storage framework that Action Line C6 calls for. (b2b6)

# Additional Comments: WSIS Performance Measures

We also call attention to Seth's analysis of the ITU's performance measures for measuring the progress of the WSIS project, found at <u>http://internetdistinction.com/wsisimpacts/2014/03/25/wsis-measures-understanding-impacts-on-the-internet/</u>.

The ITU's performance measures essentially treat all high speed connectivity as Internet without recognizing a distinction between open Internet connectivity based on autonomous networks interoperating among themselves by transmitting packets without regard for application, and networks that support services based on more specialized treatment of packets.

Among these measures, the Revenue and Investment indicator is defined in terms of industry categories that make up the telecommunications sector as defined in the International Standard Industrial Classification (ISIC), Rev. 4. Among industry categories included under telecommunications, the ISIC refers to the Internet solely in relation to a vertically integrated context ("provision of Internet access by the operator of the wired infrastructure") and not in relation to shared physical infrastructure ("purchasing access and network capacity from owners and operators of networks and providing telecommunications services using this capacity").

These observations illustrate that the WSIS project's failing to distinguish the Internet from other types of IP-based networks is a systemic problem, built into the definitions of the measures that the project uses to assess its success and progress.

We recommend not only that the WSIS performance measures distinguish open Internet from specialized services, but that they also be designed to track vertically integrated telecommunications contexts distinctly from contexts assuring competitive access to physical layer infrastructure.

We urge that assessment of the progress of the WSIS project, including the WSIS+10 Review, be performed as much as possible in the above terms, addressing characteristics and advantages of the Internet that are uniquely conducive to WSIS and broader UN goals, as well as tracking effects of different types of networks on these goals and on each other.

We recommend that United Nations agencies, including those constituting the UN GIS, incorporate these insights in framing the contribution of technologies and development programs to broader UN goals, as well as in areas of concern related to Internet Governance,

including Enhanced Cooperation, proceedings of the Internet Governance Forum, and various other proceedings such as those related to Internet-related Public Policy Issues.

Signed (affiliations listed for identification purposes only):

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