INTERNET GOVERNANCE:

CREATING OPPORTUNITIES FOR ALL

The Fourth Internet Governance Forum

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Critical Internet Resources:

Coping with the Elephant in the Room

Jeanette Hofmann

The management of critical Internet resources was a central topic throughout the World Summit on the Information Society (WSIS) process and also played a prominent role in the creation of the IGF. Seemingly irreconcilable disagreements over how to govern the Internet formed the starting point for the IGF, and some protagonists believe that progress on this matter should be the benchmark for assessing its achievements. Civil society proposed a new multi-stakeholder forum as a procedural compromise. If governments were unable to reach consensus by means of formal negotiation, a less restricted, declaration-driven space may offer a more constructive framework to overcome the political deadlock. Now that the five-year term of the IGF reaches its end, it is worth reflecting on how the IGF approached the issue of critical Internet resources and which role it may play in the further development of Internet governance.

The first section of this paper considers the topics discussed under the heading of critical Internet resources at the plenary sessions of the IGF: the Internet address space and the pending transition to IPv6; the future of the Internet Corporation for Assigned Names and Numbers (ICANN) after the end of the Joint Project Agreement (JPA); enhanced cooperation, the second Internet governance related outcome of WSIS; and new Top Level Domains (TLDs) and Internationalized Domain Names (IDNs). The second session discusses the changes in the IGF's approach to critical Internet resources: What, if anything, has been achieved since the inception of the multi-stakeholder forum? The final section offers some thoughts on the specific contribution of the IGF to the development of Internet governance arrangements. It comes to the conclusion that one of the important yet undervalued achievements of the IGF lies in the creation of a shared frame of reference that enables meaningful debates across stakeholders and political cultures.

Three out of four IGF meetings devoted a main session to the management of critical Internet resources. In Rio, the scope and definition of critical Internet resources played a central role. From the perspective of developing countries, electricity may well constitute a critical Internet resource. Other participants cautioned against overly broad definitions and recommended that the IGF should focus on issues requiring global coordination. While the workshops have offered a mixture of global and local aspects, the main sessions have indeed centred on problems of global or transnational coordination.

A common and typical element of all subjects discussed at the IGF concerns the uncharted territory in the management of critical Internet resources. In a global space without a formal constitution and established procedures, changes in the governance arrangements or the introduction of new resources

require experimentation. There are no well-tried models and methods on how to transition to a new address space under conditions of self-regulation. Likewise, there are no good examples of how to govern such a rapidly changing and expanding resource in a consensual, integrative manner. Hence, each new task in the area of critical Internet resources turns out to be pioneering work with uncertain outcomes. The debates at the IGF should be read in this spirit.

IPv4 and IPv6: Two Protocols Running in Parallel for Our Lifetime?

The addressing system of the Internet is facing the most important change since its inception in 1983. Experts expect the pool of unallocated addresses to dry out in the very near future. Although IPv6, a new and much larger address space has been available for about ten years, Internet service and content providers so far have not deployed the protocol to a significant extent. The slow uptake of IPv6 poses a serious problem because the two protocols defining the address space, IPv4 and IPv6, are incompatible; they speak different languages, as it were. This means that organizations and end users will have to use IPv4 and IPv6 addresses in parallel until all devices connected to the Internet have migrated to the new standard or are at least able to communicate in both languages. Consequently, the demand for IPv4 will keep growing even after all available IPv4 addresses have been allocated. The IGF has addressed the issues related to the transition from the various perspectives of equipment vendors, network operators, Regional Internet Registries (RIRs) and governments.

One of the first questions that may come to mind concerns responsibility: Who is actually in charge of the transition from IPv4 to IPv6? For the actors involved in Internet address management, the migration process is a shared responsibility. There is no single organization that coordinates this process on a global level. As a RIR representative explained at the meeting in Sharm El-Sheikh, "We have a great number of people who do need to move forward at the same time".[2]

The transition affects almost every product that "speaks IP", and IPv4 is indeed deeply embedded in the Internet's infrastructure. Moreover, it touches upon a lot of commercial investment in an economic environment of fierce competition: The equipment vendors need to update their products, the network operators need to update all component of the transport infrastructure, each application and website on the Internet needs to understand the new protocol, and so do the various generations of equipment on commercial and private premises. Because the Internet protocol affects so many elements of digital communication, the transition proves to be a painful process that may take much longer than originally expected. One expert predicted that both protocols, IPv4 and IPv6, will run in parallel for "at least our lifetime!"

The RIRs support the transition process through training activities in all of the five world regions. In a growing number of countries---Japan, India and

[2] www.intgovforum.org/cms/2009-igf-sharm-el-sheikh.

Egypt were examples mentioned in the main sessions---governments play an active role in encouraging more collaboration within the private sector concerned. While the Internet industry welcomes such initiatives, their effects so far have not been overwhelming. Some observers therefore have suggested that governments should assume a more encouraging role and, for example, create monetary incentives for the adoption of IPv6.

At the time of the IGF meeting in Sharm El-Sheikh in 2009, IPv6 deployment amounted to a mere "fraction of one percent" of all Internet traffic. This raises the question as to why the uptake of IPv6 is so slow and what are the obstacles that prevent vendors and operators from offering IPv6. At the Hyderabad meeting, network operators described the problems that impede a smoother transition to IPv6. From their perspective, the central issue is the lack of customer demand for IPv6. Deployment of IPv6 will not bring any new features; on the contrary, if implemented successfully, it will be completely invisible to end-users. Some observers conclude from this that customer demand will not be a driver of the migration until the shortage of address space becomes noticeably "painful" and starts hampering the growth of the Internet.

A related problem concerns the costs of the transition, which cannot easily be passed on to customers. One participant described the resulting business dilemma: "IPv6 brings three new features: address space, address space, address space"---features not easily sold as added value to customers. Financial constraints may slow down the adoption process to the operators' regular upgrade cycles where IPv6 will compete against other priorities that are backed up by customer demand. In many cases, developing countries are facing even tighter budgets for the migration process. At the Sharm El-Sheikh meeting, a participant explained the situation in Pakistan: "It took us nearly two decades to deploy an IPv4 infrastructure. And then the next thing we know…that address space is going to be out soon, and with IPv6 coming in, we have that same issue again of building that new infrastructure".

As a RIR representative summed up the situation around the time of the Sharm El-Sheikh meeting, "in fact, IPv6 isn't necessary on today's Internet. But it's going to be very necessary in two years' time." So, will the invisible hand of the market still be able to handle the transition process without major hiccups along the way? Notwithstanding the good economic reasons working against early deployment of IPv6, the Internet industry regards the market as the most effective mechanism available for coordinating all the players involved in the transition.

In light of the slow uptake of IPv6, the main session at the IGF meeting in Hyderabad also raised the issue of IPv4 address scarcity. One the proposals on the table to mitigate the shortage of IPv4 address space concerns the creation of a market for excess address space. Over the last decade, the RIRs have treated Internet addresses as a public good that cannot be traded. Should this policy be changed so that organizations can sell underutilized address space and thereby enable a more efficient use of the four billion IPv4 addresses? As it turned out, no reliable data exist on the actually utilization rates of IPv4 and, thus, on the potential size of such a second hand market for

Internet addresses. Large parts of the address space may not appear in the routing tables of the Internet because they are used in private networks.

While some address policy experts recommend a trading system as a means to mitigate the risks associated with the depletion of the address pool, others caution that the share of unused address space available for sale might be too small to make much of a difference to the upcoming bottleneck. Irrespective of such trading provisions, the RIRs reported in Sharm El-Sheikh on new policies concerning the last blocks of unallocated IPv4 address space. The regional communities designed specific allocation rules for the last "slash eight" address block (approx. 16 Million addresses) in each region to ensure that new businesses will have access to IPv4 addresses for many years to come.

Against the background of the problems surrounding IPv4, in Sharm El-Sheikh the ITU raised the possibility of an intergovernmental registry to supplement the regional allocation structures for IPv6. While the ITU regards such a public registry as a way to ensure that their member states, particularly developing countries, have access to the new address space, other participants emphasized their trust in the existing regional allocation structures.

Enhanced Cooperation: A Living Concept in a Changing Context

As a concept, "enhanced cooperation" goes back to the final phase of the negotiations of the Tunis Agenda (TA). This may explain why the language of the paragraphs 69, 70 and 71, which describe this outcome of WSIS, seems particularly vague and open to manifold interpretations. The authors of the respective paragraphs drew a link between a consensual need for enhanced cooperation and "international public policy principles pertaining to the Internet" (§ 69) but the nature of this link remains unclear. A main session at the IGF meeting in Hyderabad aimed to flesh out the possible understandings of this new concept and to discuss the actions taken by the UN to support the process towards enhanced cooperation.

In light of the TA's request to provide annual performance reports on enhanced cooperation, a representative of United Nations Department of Economic and Social Affairs (UNDESA) summarized the responses given by nine organizations on their actions[3]. According to the UNDESA, the organizations concerned understand the concept to mean the "facilitating and contributing to multi-stakeholder dialogue" as well as "formal or informal cooperative arrangements" reflecting the multi-stakeholder approach. The nine organizations engage in multi-stakeholder activities for reasons of information sharing and consensus-building. Tasked with taking stock of these Internet related actions, UNDESA notes a lack of "practical guidance as

[3] The organizations that are regarded as relevant for the process towards enhanced cooperation are: Council of Europe, ITU, ICANN, ISOC, NRO, OECD, UNESCO, WIPO, W3C.

to what makes up an enhanced level of cooperation or what makes cooperation truly enhanced".[4]

Government representatives at the main session in Hyderabad highlighted different aspects of enhanced cooperation. For some, the key element consists in "governments on equal footing". Consequently, the crucial question is to what *extent* the "present arrangements for Internet governance do enable governments, on equal footing, to develop public policy principles" pertaining to the management of critical Internet resources. The participation of governments in ICANN through arrangements such as the Governmental Advisory Committee (GAC) is considered as not conducive to enhanced cooperation because the GAC has an advisory role in contrast to the US government's supervisory role.

For other governments, the central point of enhanced cooperation is what it does not imply: enhanced cooperation, according to this interpretation, neither affects the mandate of existing international organizations nor envisages the creation of new formal structures. Enhanced cooperation should be understood as a *process* enabling governments, international organizations and other stakeholders, *in the future*, to develop "globally applicable principles on public policy issues".

A participant from civil society portrayed "enhanced cooperation" as a means to "do global public policy in a legitimate and participative manner" to shape the Internet towards the objectives defined by WSIS. He interpreted enhanced cooperation as the process which aims to fill the gap between the vision of a "people-centred, inclusive and development-oriented Information society" as described in the Geneva Declaration of Principles and "actual public policy making".

This public policy-driven interpretation contrasts with the eyewitness' account of the negotiation process. From the negotiator's perspective, enhanced cooperation constitutes a compromise. Although the majority of governments agreed that Internet governance should be improved, governments held different views on how such improvements should be achieved. While some governments aimed to enhance and re-distribute public authority in Internet governance through new policy structures, others insisted on an evolutionary approach within the existing organization framework. The "creative ambiguity" inherent in enhanced cooperation, which reflects the overall commitment to change but does not detail specific paths towards this goal, was a prerequisite of agreement to the Tunis Agenda.

Whereas enhanced cooperation and the IGF initially looked like different processes after WSIS, the latter appears now as one form of enhanced cooperation. As one of the participants at the main session put it, enhanced cooperation should be understood as a "living concept", not only because existing governance arrangements are not perfect but also because their context keeps changing.

[4] All quotes from the transcript, "Arrangements for Internet Governance, Global and National/Regional", www.intgovforum.org/cms/hyderabad_prog/AfIGGN.html.

Post-JPA and the Internationalization of ICANN

In September 2009, the JPA, one of the two contracts between the US government and ICANN, was replaced by a new arrangement, the Affirmation of Commitments (AoC). The main session on managing critical Internet resources in Sharm El-Sheikh discussed the meaning of this change and the ways in which it may affect the internationalization of ICANN.

From the perspective of ICANN, the AoC adds several new elements to the management of critical Internet resources. The central change is that ICANN has to commit itself to act as a responsible organization "in the global public interest". The AoC recognizes ICANN's organizational independence and introduces four periodic review processes to assess if ICANN meets its commitments. Furthermore, ICANN will analyze and publish the positive and negative effects of its decisions to explain how its policy decisions are reached. It is also worth mentioning that, unlike the JPA, the AoC does not include an expiration date; it is intended to be a long-term agreement.

Many speakers at the IGF acknowledged the AoC as a major step towards the internationalization of Internet governance. At the same time, however, several observers predicted that, as a consequence of the new agreement, "not so much will change in the business that ICANN does". A number of participants pointed out that the Internet Assigned Numbers Authority (IANA) contract, which covers among other things administrative functions related to the root zone file and the address space, represents the "bigger step" towards the internationalization of ICANN. Another protagonist reminded the audience that the US Government remains "the sole global authority" that approves all delegations and re-delegations of TLDs and that most likely the authority for signing the root will also lie with the US Government. Along the same lines, a government representative questioned the independence ICANN has gained through the AoC.

The IANA contract, the second contract between the US government and ICANN, ends in September 2010. Should the responsibility for the IANA functions also be delegated to ICANN, as one speaker suggested? Although the audience welcomed the prospect of a further internationalization of the management of critical Internet resources, it did not agree on an adequate organizational arrangement for the IANA functions. Whereas some speakers firmly believed that intergovernmental organizations would provide a suitable home, others argued that civil society should not longer look to governments but rather build organizational structures by itself: "We should look more to create structures that accrue trust on themselves".

Some participants welcomed the AoC, particularly the newly introduced review mechanisms, as an opportunity to "engage ourselves and help out with this new and more open model". In the same vein, another actor characterized the new review panels as a "step towards a real form of global accountability to a global public". Nevertheless, there are challenges, as another speaker cautioned, and these challenges are about the implementation and the methods of these new processes. Self-reviews by ICANN, other participants agreed, are not "a substitute for accountability".

While the AoC means progress to many observers, it leaves several questions unanswered. One of the gaps highlighted in the main session at the meeting in Sharm El-Sheikh concerns the IANA contract and the political implications of DNSSEC: "As if the root zone management has nothing to do with the whole issue", as a participant put it. Other gaps highlighted by a critic concern a more explicit "commitment of ICANN towards freedom of expression, association, and the right to privacy".

Modifications of the DNS: DNSSEC, IDNs and New TLDs

Around the time of the IGF meeting in Sharm El-Sheikh, the technical community was planning to modify the domain name system in four different ways. A first change concerns the introduction of IDNs, that is domain names containing characters with non-Latin scripts. ICANN has developed a fast track process to enable the creation of new country code TLDs (ccTLDs) for countries with languages based such scripts. The second modification relates to DNSSEC, a set of extensions designed to prevent specific types of attacks by authenticating the origin of DNS data. DNSSEC is scheduled to be added to the root in summer 2010. A third change pertains to the long-awaited delegation of new generic TLDs. The fourth change involves adding IPv6 addresses to the name servers in the root. The so-called glue records enable TLD servers to respond to queries from hosts with IPv6 addresses. The main session on critical Internet resources in Sharm El-Sheikh addressed the first three of these modifications.

Given that the DNS has not been subject to substantial changes for a long time, the technical community conducted studies to understand the potential impact of these modifications on the performance of the Internet. A central outcome of the "root scaling study" is that stress for the DNS might result from the rate rather than the extent of changes. As one of the authors of that study explained, "The root system...can accept lots of changes, and over time it is possible to change all of it, if we have to. But it takes time." Members of the audience inquired about the policy implications of this recommendation: Will the signing of the root result in further deferrals of new TLDs? The root scaling study suggests that the root should be signed before new TLDs are added because DNSSEC will enlarge the size of the root.

Participants involved in applications for IDN ccTLDs expect the new ccTLDs to significantly trigger local content and multilingual applications. Yet, one expert added a note of caution. Even if IDN ccTLDs are introduced very soon, it will take some time until all relevant Internet applications are able to understand the new language scripts. This includes also email, which may take a year to implement.

The introduction of IDN ccTLDs may also raise regulatory issues. These concern, for example, the relationship between incumbent operators and the new, non-Latin ccTLD. In Japan, a complex selection process has been set in motion to determine which organization and which policies should govern the new non-Latin name space. The option of having two different ccTLDs proves to be a domestic challenge as a participant of the Japanese policy process explained. Another observer warned against using the introduction of

IDN ccTLDs as an opportunity to withdraw recognition of existing ccTLDs: "One would encourage every government and society to be respectful of their ccTLDs in this transition."

While optimists expect the deployment of IPv6, DNSSEC and new TLDs to be an equal playing field for all countries and stakeholders, including those in the global south, other participants expressed concerns over high application fees for new gTLDs. The costs of the application process may exclude applicants with less financial resources. Claims to geographic names which were mentioned in Sharm El-Sheikh only in passing, may become a regulatory issue to be discussed at future IGFs.

In sum, the participants of the main sessions on critical Internet resources have approached the various subjects in a rather pragmatic way. Compared to the antagonistic atmosphere throughout WSIS, matters of principle have lost some of their traction. The focus of the debate has shifted from the role of governments and intergovernmental processes to concrete regulatory issues relating to critical Internet resources. The changing agenda probably reflects the different composition of the multi-stakeholder audience, which includes not only a higher number of civil society and private sector participants but also many practitioners. Perhaps it also indicates a certain fatigue on issues that require a long-term approach.

Building Capacity and Breaking a Taboo: Achievements of the IGF

An objective assessment of the achievements of the IGF throughout its first years is of course not possible. Perceptions on the IGF's performance differ depending on one's own expectations, aims and experiences. The following observations draw on the transcripts of the main sessions on critical Internet resources and on personal impressions, including those gained as a member of the Multistakeholder Advisory Group (MAG).

It is no coincidence that this chapter's first section on the topics discussed at the IGF mainly relies on the meetings in Hyderabad and Sharm El-Sheikh. Only the third and the fourth meeting were able to address the management of critical Internet resources in a detailed and systematic manner. The first IGF meeting in Athens remained more or less silent on all controversial issues; it simply omitted critical Internet resources from the agenda. Although the MAG had tried hard to provide a balanced and diverse program, it could not agree to include critical Internet resources in the program. A significant number of MAG members feared that a main session on critical Internet resources would be used for pillorying ICANN.

The widely shared concern of merely reproducing lines of conflict in the well-known WSIS style also affected the public debate at the first IGF meeting. When a participant brought up the issue of political authority over the DNS root and address space, the panel did not respond. Instead, the moderator encouraged the panel and the audience to stay away from this topic: "…the thoughts that are unspoken in the room and maybe on the panel are that if we have learned anything from the last four years of these discussions, it's that the idea that Internet governance is a lot broader and a lot more than just that

one issue. And that we have all talked about that issue and we kind of recognize it is the gorilla in the room that's far away. But there's other issues that we want to talk about that we feel that are just as pressing, such as security, openness, access, and diversity. And it might be a sign of the health of the dialogue that we actually remain mute on this one topic but actually have a lot to say on the others."[5]

It is worth reflecting on these early episodes in such detail because they illustrate what a long way the IGF has come since its inception in 2006. Looking back, the first meetings of the multi-stakeholder advisory group were shaped by a pervasive sense of risk. The idea of an open multi-stakeholder dialogue, be it in the form of plenary sessions or self-organized workshops, was met with uncertainty and a vague desire for control: How could an open dialogue be organized in a constructive way? Which topics should be on the agenda? Should the number of workshops be restricted, and how would their outcomes relate to the IGF itself? Could self-organized workshops be defined as a supporting program independent of the actual IGF?

With the memories of the WSIS debates still fresh, the program of the first IGF aimed to avoid controversial issues altogether. At the time of the IGF meetings in 2006 and 2007, the management of critical Internet resources in general and the future of ICANN in particular came close to being a taboo. The same was true for the topic of "enhanced cooperation", which, according to some actors, should not be at all addressed at the IGF on the grounds that the Tunis Agenda defined it as a separate process completely independent of the IGF. Enhanced cooperation, in this view, would become an intergovernmental equivalent to the IGF.

In 2008, at the meeting in Hyderabad, the situation had changed. Multi-stakeholder dialogue and self-organized workshops were not longer regarded as dangerous. The MAG not only allocated two main sessions to the issues of management of critical Internet resources and enhanced cooperation, it also began experimenting with the meeting format. The second plenary session was designed as an open dialogue without any panels or speakers to channel the discussion. It was the goal of this new format to allow more time for public exchange and focus on the contributions from the audience. This new open format proved to be so successful that it was extended to other main sessions in the following years.

A closer look at the first open dialogue in Hyderabad reveals a surprising degree of diversity in terms of how the audience addressed the various topics. The discussion on the Internet address space focused, among other things, on the slow uptake of IPv6. It highlighted some of the problems that organizations of the Internet industry face in light of the pending transition. Thus, the "take away" of this part of the open dialogue was a perhaps more comprehensive understanding of the complexity as well as the financial constraints involved in the market-driven transition process.

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[5] See, www.intgovforum.org/cms/IGF-Panel1-301006.txt. More commonly, IGF participants have referred to the "elephant in the room"---hence the title of this chapter.

The open debate on enhanced cooperation, on the other hand, illuminated the broad range of possible interpretations of this concept including the specific language of the Tunis Agenda supporting these diverging views. Particularly striking were the different perceptions of the respective paragraphs 69 to 71. While some emphasized the importance of "equal footing" as a benchmark for assessing Internet governance arrangements, others regard the *process* towards enhanced cooperation mentioned in paragraph 71 as the key to its correct interpretation. From an advocacy perspective, in turn, enhanced cooperation makes sense in the context of the WSIS vision of a people-centred and development oriented information society.

The strength of this first multi-stakeholder debate on enhanced cooperation was that it went beyond a mere exchange of opinions. It acknowledged the ambiguity of the term, presented the variety of meanings and, above all, managed to portray these meanings as equally legitimate. The notion of enhanced cooperation as a "living concept" brought up by one of the panellists testifies to this achievement. The mutual respect shown for conflicting views among the audience suggests a collective learning experience which allowed the participants to fully benefit from the diversity of political values and rationalities assembled at the meeting. While the discussion on the management of the Internet address space offered insights on the challenges of a self-governed industry, the debate on enhanced cooperation enlightened the audience on the scope of valid interpretations. One of the moderators summarized this discursive accomplishment by speculating on the future role of the IGF in this field: "So perhaps there is a role for the IGF in this context. As a non-threatening environment for discussion, where we don't have to make decisions, we can talk, share practical experiences from different perspectives, and as we heard this morning, move to the point, perhaps, where we can listening to each other, moving from a disconnected series of statements to a shared conversation, no longer comfortably numb, perhaps, but invigorated by a true exchange of views."[6]

Although the IGF has not led to a convergence of expectations and views, it has created a communicative space which in itself leaves an imprint on further debates on the management of critical Internet resources. A first indicator of such changes can be seen in the fact that fundamental matters such as the legitimacy of the current political oversight arrangements have ceased to overshadow all other relevant aspects of Internet governance. While still regarded as important, Internet governance arrangements are now discussed in more specific ways, thereby better reflecting the perspective of those actors who negotiate and implement regulatory rules. From a regulatory perspective, however, Internet governance arrangements present themselves in a variety of ways. Political oversight over the DNS differs from that over the address space. As the example of the Internet address space demonstrates, no single actor has proved to be powerful enough to organize the transition from IPv4 to IPv6. Furthermore, political concepts such enhanced cooperation or the AoC are assuming new meanings when put to

[6] www.intgovforum.org/cms/hyderabad_prog/OD_CIR.html.

practice. A pragmatic debate of the management of critical Internet resources is able to take notice and acknowledge such changes.

To some extent, the increasing emphasis on policy questions reflects the particular structure and composition of the IGF. While WSIS was essentially an intergovernmental process with additional multi-stakeholder provisions, the IGF is, as one of the speakers at the stock taking session in Sharm El-Sheikh characterized it, a "hybrid of U.N. intergovernmental and nongovernmental protocol and practice where individuals and institutions concerned with Internet governance and development gather". This hybrid creates a space "where all stakeholders feel comfortable, to the extent they can contribute meaningfully and openly in discussion, debate, and collaborative planning with other stakeholders."[7] As a result of this unique space, more attention is given to the operational but also the civil liberty dimension of Internet governance.

The most important merit of the IGF so far might actually lie in the area of capacity building. Thanks to the IGF, a greater number of people today have a more comprehensive picture of the management of critical Internet resources, including the various interests and conflicting visions surrounding this field. At the stock taking session in Sharm El-Sheikh, one of the speakers expressed this in the following way: "I don't deny that for national or international bureaucrat accustomed to the rigidities of forms and format, it can appear irritatingly messy. But we are prepared to take a bit of mess in exchange for the extraordinary capacity building potential that this forum offers". The specific charm of capacity building in the context of the IGF is that it works both ways. All information providers are at the same time information recipients.

A closer integration of the various rationalities and goals shaping Internet governance has been achieved and the actors involved may have a better sense of the interplay but also the inconsistencies between criteria of global legitimacy, practical requirements of the policy processes, and the logics of the market. Interestingly, the multi-stakeholder dialogue also undermines the traditional distinction between technical and public policy issues in Internet governance that still shaped the thinking reflected in the Tunis Agenda. Discussing policy implications of technical decisions has become a common practice at the IGF.

Thanks to the pragmatic focus of the discussions, the participants have developed a level of confidence and ownership in the process that enable public exchange even on controversial or complex aspects of the management of critical Internet resources. Considering how strong the original concerns were against putting the management of critical Internet resources, and thus ICANN, once again at centre stage, this is no small achievement. The big animal in the room, be it a gorilla or an elephant, has disappeared. At least for the time being.

[7] www.intgovforum.org/cms/2009-igf-sharm-el-sheikh.

Lessons Learned: The Strength of Intangible Outcomes

WSIS was the first public international process that addressed the management of critical Internet resources from an intergovernmental perspective. Moreover, it was the first time that ICANN itself became an item on the international agenda. With hindsight, WSIS will probably be regarded as a turning point in the development of Internet governance. Even if the endless controversies seemed counterproductive more often than not, WSIS set an irreversible process in motion that has profoundly transformed the political landscape of Internet governance. Two points are worth stressing in this context.

First, WSIS made it clear that ICANN is accountable not only to one government and the relevant Internet industry but to a much broader global community of stakeholders. Second, WSIS expressed an, albeit vague, need for a general normative framework, the so-called globally applicable public policy principles, arching over the regulatory and operative matters of Internet governance. In the long run, the performance of policy making and the legitimacy of political oversight structures could be assessed against such a consensual framework. The WSIS documents specify a few basic principles that may help pave the way towards such ambitious visions. Considering the status quo of the debate on enhanced cooperation, however, the development of a consensual set of public policy principles for Internet governance still seems a long way.

The unilateral oversight arrangement in Internet governance formed a key issue throughout WSIS and for some it remains the raison d'être of the IGF. At the moment, however, a full internationalization of critical Internet resource management can at best be conceived as a long-term process. As a minimum, steps towards internationalization would require broad political consensus on the type of the intended arrangement that would replace unilateral oversight, including its scope, goals and underlying norms. Throughout its first term, the IGF has largely managed to remove the taboo surrounding ICANN and the management of critical Internet resources after WSIS. Five years after WSIS, international public debates on Internet governance can take place without getting bogged down in ideological deadlocks. In view of the likely renewal of the IGF's mandate, one may ask what lessons can be learned from the present achievements or, to be more precise, how can the IGF use its specific strengths to support the goal of a legitimate management of critical Internet resources as outlined in the WSIS documents.

At the formal consultation held by the UNDESA at the meeting in Sharm El-Sheikh, a considerable number of speakers emphasized the IGF's "significant impacts on Internet governance", which are, as one participant conceded, "not easy to measure, but still very real".[8] Lacking formal decision-making authority, the IGF can only produce soft outputs in the form of collective learning, networking or influencing more powerful third parties. The relevance of soft and hard-to-measure results is not undisputed though. Can the IGF really be a "catalyst for change", as one speaker portrayed the forum,

[8] The transcripts of the stock taking consultation held by UNDESA can be found at, www.intgovforum.org/cms/2009-igf-sharm-el-sheikh.

merely by providing a space for exchange of experience and opinion? Sceptics suspect that the ostentatious appreciation of the IGF's soft outputs is a mere pretext to fend off attempts to create a formal international decision making authority. However, the discursive achievements of the IGF deserve to be taken seriously.

The multi-stakeholder and trans-disciplinary perspective of the IGF fosters a dialogue among actors who normally operate in more or less separate worlds. Conversations between different stakeholders groups which evolve almost naturally at IGF meetings used to be rare and rather complicated to organize. Even in the Internet world where organizational boundaries are often informal, professional boundaries may prove to be pretty tight. Multi-stakeholder interaction across professional boundaries is a necessary precondition for developing a common understanding of the issues in Internet governance. An important, yet somewhat undervalued achievement of the IGF consists in shared frames of reference which build conceptual bridges between stakeholders, regions and political cultures. Some evidence for such processes of "semantic world ordering" can be found in the emerging terms of art such as 'critical Internet resources', 'multi-stakeholder approach' or even 'enhanced cooperation', which are gradually acquiring stable sets of meanings. While the development of collective frames of reference do not necessarily mean consensus, they indicate progress in debates on policy principles and goals. As one speaker at the UNDESA consultation in Sharm El-Sheikh observed, "we have become more receptive to each other's perspectives and concerns. As participants have adapted to this open environment, we have seen rhetoric reduced." Put differently, the IGF helps developing a common ground around the policy issues related to Internet governance it addresses; a common ground which allows people with diverse backgrounds and competences at the very least to agree on what they still disagree upon.

Shared understandings of the problems at hand not only facilitate political debate, they are also an essential element of public and private regulation. Policies governing the allocation of Internet addresses, the introduction of new TLDs or accountability provisions for ICANN draw their rationales from general accounts of the issues they aim to tackle. Problem statements of the pending address shortage, desirable competition in Internet's the name space or the need to hold ICANN accountable imply observations, values, concerns and expectations. Such perceptions don't originate from single actors; they are the result of public reflections or "joint authorship". A growing number of people, organizations and events contribute to the evolving semantic framework underlying Internet governance, and the IGF, including its recent regional offshoots, has arguably become the most important open platform for its review and continuous transformation. Due to its transnational scope and its links to other international organizations, the IGF's multi-stakeholder dialogue contributes to the emerging transnational public sphere in the field of Internet governance. This is also reflected in the fact that some of the policy principles shaped throughout WSIS and the IGF are migrating to other organizations both on the national and international level. In the case of ICANN, for example, they have been adopted as building blocks for the recently created accountability framework.

The present strength of the IGF lies in this specific type of discursive capacity building at the interface of intergovernmental organizations, civil society advocacy and private self-regulation. While the patronage of the U.N. lends authority and structure to the IGF, the multi-stakeholder approach has managed to override many of the constraining provisions typical of U.N processes. In particular, this concerns privileges of participation and speaking rights. The unique combination of institutional anchoring in the U.N. and experimental multi-stakeholder arrangement turns the IGF into a laboratory of transnational coordination that seems to work precisely because it does not draw on formal decision-making but the legitimacy of the institution. It is no secret that the efficacy of regulatory norms generally depends to a considerable degree on their acceptance by the people concerned. This is particularly true for transnational regulation where enforcement capacities are weak and compliance is uncertain. Internet governance arrangements thus depend on the consent of the governed and the question is if and how the IGF can be used to enhance such consensus-building processes.

Conclusion

Throughout its first five years, the development of the IGF was largely driven by the expectations and the feedback and of its attendees. Each annual meeting has experimented with new communication formats in order to get the most out of a multi-stakeholder dialogue aiming to increase the capacity for collective deliberation in the Habermasian spirit of an "ideal speech situation". The future role – and legitimacy – of the IGF will depend on its ability to reconcile the diverse expectations that have emerged in light of the present experiences. This concern in particular growing calls for outcomes: How can insights gained at IGF meetings are made more durable? Can agreements reached in open discussions be recorded in forms that would allow other organizations to benefit from them? And finally, should the IGF set itself tasks and design communication formats that explicitly target consensual outcomes? Considering its tradition of trial and error, the IGF should not shrink back from experimenting with new ways of organizing debates and documenting them. The regional IGFs may have already taken the lead in this context and should be able to demonstrate how to best respond to the quest for outcomes.

However the IGF will deal with the call for more tangible outcomes, its future role, and political weight, will likely be that of a soft normative authority rather than a formally constituted body passing judgments. Its strength lies in creating a global public sphere for Internet governance rather than in setting rules. The IGF is also good at linking principal concerns to practical experiences; a well-suited basis for sounding out scenarios of internationalization.