The ISP Column

An occasional column on things Internet

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Public Policy Questions for Internet Governance

Geoff Huston

There is little doubt that the Internet has formed part of the impetus for a revolutionary change in the nature of the global communications industry. “Revolutionary” in the sense that the past decade has seen fundamental and highly disruptive changes in the nature of the underlying technologies used by the industry, changes in the composition, ownership and role of industry players, changes in the nature of services offered to the end consumer, changes in the associated financial models used by the industry, and changes in the regulatory environments in which this industry operates.

Considering that this industry was, in the latter half of the twentieth century, one of the largest and most influential industry sectors on a global basis, these revolutionary changes will doubtless have consequences that will echo onward for some time yet.

Accordingly, when looking at the particular topic of “Internet Governance” from a perspective of public policy questions, it’s not easy to examine this topic without bringing in some of the broader context of the communications industry, it’s history and the expectations as to it’s future.

The industry of global communications is not a recent phenomenon. One can trace it’s history back through telephony, the telegraph system and the postal system. This history extends back many centuries. Up until today, however, communications services were never offered as a ubiquitous commodity. The infrastructure, be it undersea cables, geostationary satellites, extensive copper networks or switching systems, was expensive to construct, offered limited capacity and served only a limited set of potential consumers of the service. The associated infrastructure investments were significant both in terms of their monetary value and the period of the investment. For many years the only players who were willing to undertake that form of investment was the public sector.

As an example, when the first telegraph systems spanned the world over 130 years ago, to send just 30 words from one part of the globe to the other side, from Australia to the United Kingdom for example, those 30 words cost three weeks' average wages. One could confidently expect that at least one-third of those words were irretrievably garbled in the process. The cable systems were commonly financed by public monies and commonly operated by public authorities. This position was largely maintained through much of the history of the deployment of the global telephone network through the twentieth century.

Today’s Global Communications Sector

While communications was an historically expensive service, it's now become a commodity and the investments and the players are changing as the industry itself changes into a conventional utility model.

The progressive deregulation of this industry is not an accident. Given that the price-based barriers to entry for competitive providers are coming down, and given the increased capability of the technology to support more complex operating models that are associated with competitive providers, progressive deregulation of the industry is a natural step. Now communications is a commodity-based service, largely fuelled by private sector investment. We are now seeing the traditional models of defined roles for each player, be it an international carrier, a national inter-exchange carrier, a local access provider, becoming blurred into a mesh of competitive suppliers operating in open competition.

Replacing a regulated monopoly operator model is now a different dynamic of competitive suppliers and consumer choice. The moderation of the market is one related more to the disciplines of competitive supply. More fundamentally, the nature of the demand and supply models has changed. The traditional telephony model was one of extensive over-supply, with artificial constraints applied through monopoly price premiums in order to ensure the viability of the original infrastructure investment. This dynamic has changed into a more conventional market-based dynamic equilibrium, where demand is the predominate factor in determining levels of supply.

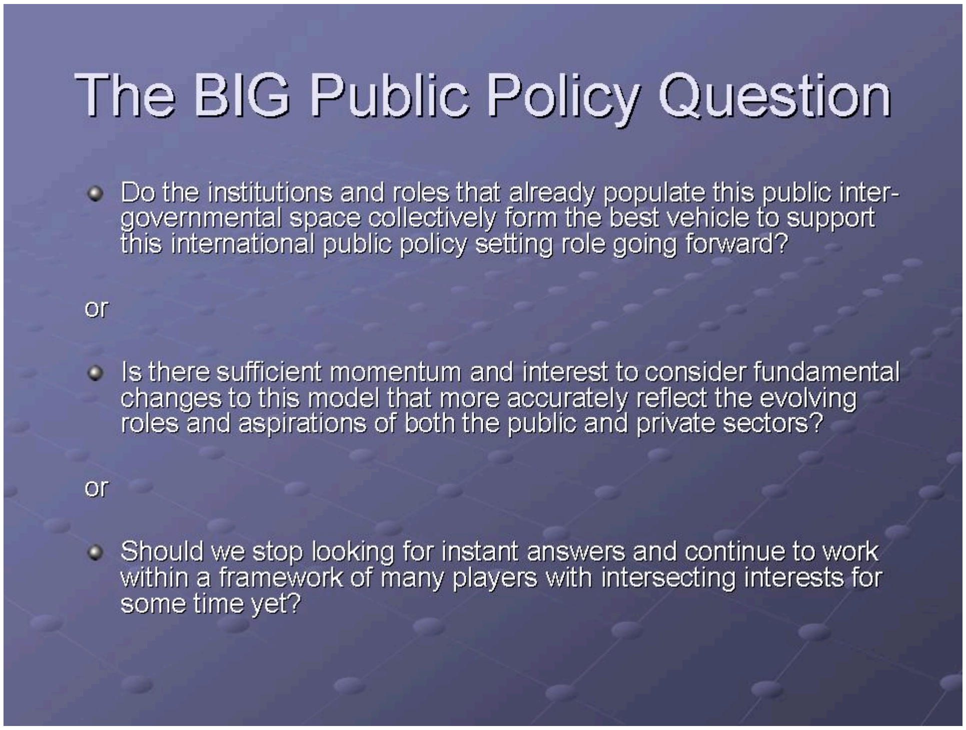
The regulatory role has also changed as a result of these structural changes within the industry. What we are seeing in today’s industry is progressive deregulation of this industry as the cost of communications comes down. The landscape now features many suppliers operating in an open and competitive market. Some suppliers continue to operate as “full-service” comprehensive providers, while others concentrate on particular services and particular market segments. That change in the supplier model doesn't imply the public sector has taken a step back. The public sector and the related public service objectives remains part of the overall structure of the industry. Many countries, if not all, still have reserve regulatory powers. Markets can be distorted. Markets can fail. In such cases reserve powers are one way to correct the distortions and ensure continuity of service.

The role of the public sector is changing to one of the definition of reserve national regulatory powers to ensure fair open market behaviour and outcomes consistent with related national objectives.

The residual issue here is that of the international space, and it should be recognised that associated with this progression of communications service provision into the private sector with the associated model of competitive pressure, there are far fewer international regulatory levers that can be applied to this particular aspect of the industry.

This does not imply that there is no residual role for public sector regulatory interest other than overseeing the operation of competitive market in a national context. One of the more significant changes in recent years in the pattern of communication is the proportionate rise of international communications, and this has raised a number of public policy issues. How are such issues to be addressed? How are various, diverse national interests reconciled into a common framework for global communications. What are the roles for international agencies? How do existing inter-governmental treaties impact on this activity? Is there a role for coordination of national regulatory frameworks at an international level?

The Big Public Policy Question



The trend towards an industry based on competitive pressures within open market structures does not imply that the public sector's interests have disappeared. The public sector interest is constant within an activity of supply of public communications services. The public sector is always there at both national and international levels.

Transcending most of the specific policy issues in today's international communications sector is a larger question pertaining to the institutions that populate the public inter-governmental space. Are the institutions that we currently have in this space the best we can devise? Does their mission, governance structure, constituency base, charter, activity protocol, and mandate match the future requirements for coordination of activity in this sector?

One can take a highly critical look at the ITU-T, one of the central institutions in the public policy space. At one extreme, critics of the ITU-T would quite happily characterise this as a moribund, historical and largely irrelevant organisation in today's environment. With the advent of the Internet, with the increasing, and indeed almost dominant, private sector current activity levels in most markets today, the ITU-T, with it's intergovernmental governance structure, appears to be grappling, some would add "desperately", for a future role in this changing space. One of the more fundamental issues here is that it does not readily reflect the full diversity of today's communications sector, where the private sector appears to be cast in the role of passive observers to a public-sector lead activity.

But, equally, one can point at ICANN and observe that this institution also attracts harsh criticism. Critics of ICANN need look no further than recent decisions concerning the top level domains of ".net" and ".xxx" to see an institution whose decisions could readily be characterized as erratic. If one wanted to go a little further the issues relating to the deployment of a wildcard entry in .com and the site finder matter do not portray ICANN as an institution with a clear and accepted mandate, nor do the longstanding issues with Verisign, and the related US legal actions. The reasons for those decisions do not appear to be logical or consistent. "It appears," say critics, "that ICANN is captured. It's captured by sector interests. It's even captured by particular national interests at the expense of everyone else." So ICANN is not without it's criticism, and, again, this institution does not appear to reflect the full diversity of sector interests.

One could also look at the Regional Internet Registries in the same critical manner. What is their role? And how effective are they in undertaking it? Critics would point out that while the RIRs reflect an industry-based self-regulatory framework, the question is where is the public sector within this process? How do the RIRs integrate industry views, which often are necessarily short-term, with the longer-term view of resource management? And, if you think that's an abstract question, maybe you should think again. As we run through the remaining IPv4 address resource, who should get the last /8? How do we balance the interests of developing economies, who would like to say, "Look, give us some space to make some investments in IPv4. We don't think we can afford to do IPv6 yet," against the interests of a large and dynamic industry in the more developed parts of our world who say, "Give us more addresses, we need them today." How are we going to balance those conflicting demands on a dwindling resource? What's the public sector dimension within this discussion? And are RIR forums appropriate to be able to discuss that rationally, properly, and achieve outcomes that reflect reasonable consensus? What is the public sector interest here and how can this be factored into the overall consideration of this matter?

So I would suggest that, from the global to the regional, institutionally in this international space we haven't really got it right yet for the Internet. We still have further to go, as it certainly appears to be the case that none of our existing institutions accurately reflect the full spectrum of sector players and their corresponding interests.

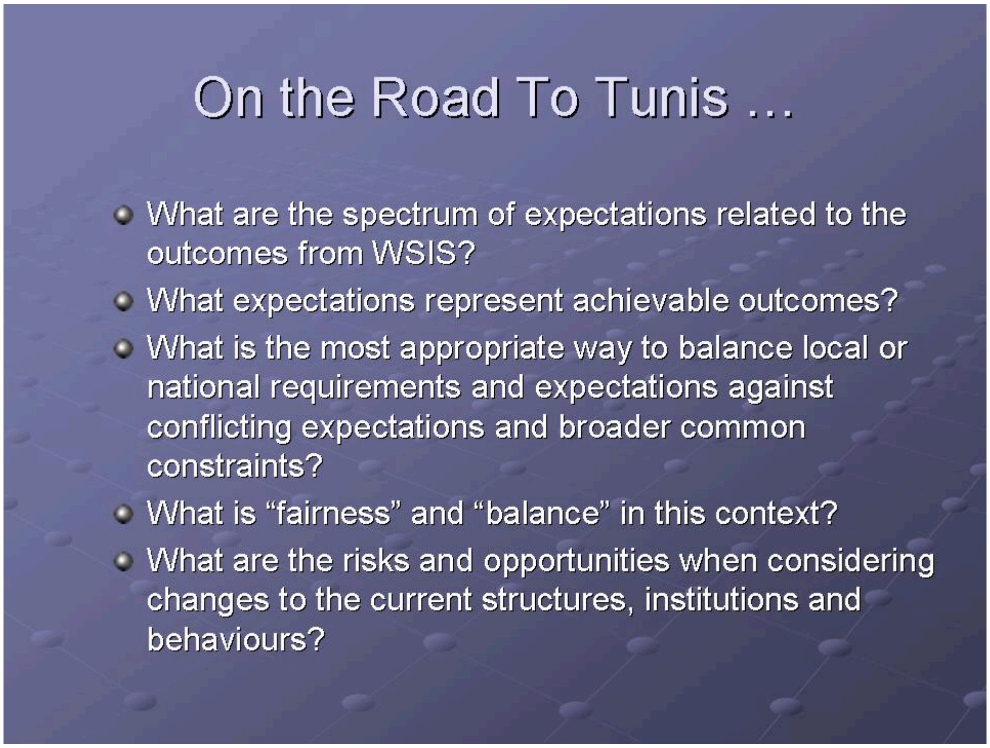
So should we consider institutional change in this space? While the WGIG reports fell short of specific recommendations for institutional reform and change, maybe change of these institutions is required at this point in time. Perhaps when we look at these institutions, it is reasonable to conclude that none of them today fully reflect the broad spectrum of players and interests. All of them appear to be sectorial one way or another and the intersections across these institutions do not appear to be working properly.

Within the overall framework of the WSIS program there may be scope to pose the questions: "How should the global communications industry charter institutions that accurately reflect the diverse interests of private and public sector players? How should an institutional framework reflect the interests of consumers as well as governments, industry, technology, and broader societal aspirations? How should such institutions reflect industry involvement and industry investment? What are our expectations?"

But a word of caution is appropriate at this juncture. International institutions are never effective as leaders. They're not the focal point of revolutions and they are not revolutionary in nature. International institutions cannot take positions and remain viable within their constituencies if they constantly challenge every last constituency member to think differently, to make different decisions, and to act in a manner that is contrary to their perceived interests. International institutions tend to be more like mirrors. They're mirrors of the players, they're not leaders. And, in being a mirror, they're generally always after the event. In other words such institutions are effective when they embrace conventional wisdoms rather than challenge them, when they follow the event rather than lead the charge, and when they make decisions that are conservative rather than challenging and provocative.

So, in thinking about WSIS, in thinking about this process, are we asking for instant answers when they shouldn't happen? Are we asking for radical change when the best we should expect is a more gradual process of transition? Are we asking for reform in a leadership role where it is not going to happen? Such institutions are generally conservative, not revolutionary. So maybe we should be more patient here, and revise our expectations down to a more realistic level.

On the Road to Tunis



So there are a few questions that I'd like to pose that perhaps deserve some consideration while we are on the road to Tunis.

What is the spectrum of expectations related to WSIS?

Some folk would see this as the opportunity to actually get back to an agenda of addressing the digital divide, of using the communications industry as a vehicle for structural cross-subsidisation across national and regional disparities.

Some would see that the expectations around WSIS are of a more defensive theme: "Please don't do damage to a system that is actually working phenomenally well. Don't change things. The Internet happened simply because of this progressive area of deregulation. The private sector has managed to pull off a revolution in communication. Don't stifle it.”

Such expectations seem almost contradictory, but both of those expectations are on the table as we go to Tunis.

So what's a realistic expectation from an international body that attempts to create common consensus? What's the lowest common denominator we can expect? I would offer the personal perspective that many of these expectations are unrealistically high.

How do we balance national expectations and national agendas that conflict with others? Because, certainly, if you look at the world, there are a huge variety of national expectations and they're not all the same. How will those harmonise? And, equally, we are talking about technology – no matter how useful it would be when applied selectively, anti-gravity simply doesn't exist. There are a set of common constraints bounded in the way technology works. I’d like to quote John Klensin here to illustrate this: “You can route politics or you can route packets but not both at the same time.” How do we recognise those common technology constraints inside forums where the technology viewpoint is simply not there? Those technology folk aren't at that table.

So what's fairness in balance inside such a diverse environment? How do you achieve outcomes that we can readily recognise involve compromise? What precisely are we trying to achieve here? And when we consider changes to these current structures, current institutions and current behaviours, what are the risks as well as the opportunities?

I suspect that, when we deal with public international institutions whose roots can go back decades to centuries, we're asking way too much of ourselves in trying to achieve outcomes that position such institutions as radical leaders while at the same time wanting to see outcomes that have high confidence, comfort and acceptance levels from all of us individually, institutionally, and nationally. There are no instant answers and WSIS is not an end in itself.

As far as I can see there will not be any revolutionary answers coming in November of 2005 at the World Summit of the Information Society, nor even any substantive departure from the current status quo. The current order will not change this time around at this particular meeting. But if we meet again in 10 years from now, I suspect that things will have changed. Because ultimately, institutions survive and thrive in the international space when they are reflective of the environment and when they engage with that environment in meaningful ways. Such institutions cannot remain historical anachronisms, nor can they only represent a limited set of sectorial interests as they attempt to move forward. They have to embrace a broad plurality of interests that reflect the world as we know it if they are to survive and thrive. So each of these public institutions will, naturally, strive to survive, and in so doing they will inevitably change to better reflect their environment and interests of their constituencies, and furthermore they will need to engage in these issues in a way that will embrace a developing common understanding (or "conventional wisdom, if you want) of the way forward. So change will happen, but not overnight and not immediately, but will happen as a gradual process of reflecting the common view and the conventional perspectives as they evolve in the coming years.

And the agenda for the Regional Internet Registries includes the consideration that some time well within the next 10 years we have to reach a rational, reasonable, fair and balanced outcome about what we do with the remaining unallocated address resources available to us in IPv4. We'll also have had to put in place policies and processes that reflect our considerable expectations for IPv6.

This is an edited transcript of a presentation by the author at APNIC 20, on the topic of Internet Governance.
http://www.apnic.net/meetings/20/programme/igov-discussion.html

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About the Author

Geoff Huston B.Sc., M.Sc., has been closely involved with the development of the Internet for many years, particularly within Australia, where he was responsible for the initial build of the Internet within the Australian academic and research sector. He is author of a number of Internet-related books, and has been active in the Internet Engineering Task Force for many years.

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