



Addressing the Issues of Internet Governance for Development: A Framework for Setting an Agenda for Effective Coordination

by

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Overview

The World Summits on the Information Society (WSIS) in 2003 and 2005, including the establishment by the United Nations of the Working Group on Internet Governance (WGIG) after the first Summit, signalled the growing global significance of the opportunities and threats (e.g. see Dutton 2004) created by the development and use across the world of the Internet and related information and communication technologies (ICTs). The formation of the Internet Governance Forum (IGF), following the WGIG (2005) report, was an important step in creating a flexible procedural structure for identifying, discussing and addressing key issues through a growing multi-stakeholder policy dialogue. This paper outlines a framework for agenda setting that could help the Forum to ensure these processes identify and attend to the key substantive issues that merit discussion at the Forum. It is anchored on the view that most issues of Internet governance for development are being grappled with by many separate but interdependent actors and agencies at various levels. However, this creates a need to identify issues that are not 'owned', or not well understood, in order to facilitate the creation of bridges between actors and agencies trying to tackle the same or similar issues. It draws on various research initiatives at Oxford University's Oxford Internet Institute (OII), particularly an international forum on Internet governance² (see Dutton and Peltu 2005) and a series of seminars reflecting on civil society participation in the WSIS³.

Towards a new era of multi-stakeholder Internet Governance

The transformation of Internet governance

In the first few decades after the emergence in the Internet in the late 1960s, awareness of this technology and its potential uses and impacts remained mainly within expert groups of ICT developers and a largely academic and research user

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² Organized in collaboration with the Berkman Center for Internet and Society at Harvard Law School and sponsored by Afilias, the *Economist*, Nominet UK and the Public Internet Registry.

³ The seminar series (see www.oii.ox.ac.uk/research/project.cfm?id=30) was supported by grant RES-451-26-0295 from the UK Economic and Social Research Council.



base. This period saw the emergence of highly flexible, decentralized and pluralistic governance arrangements⁴, albeit dominated by technical expertise. These included the Internet Engineering Task Force (IETF)⁵ from 1986 and the Internet Society (ISOC), established in 1992 to provide an institutional home and financial support for the Internet standards process which by then had to accommodate growing commercial interests in this network of networks.

Such governance arrangements reflected the pioneering Internet community's shared commitment to maintaining the founding design principles of end-to-end (e2e) openness, core architectural stability and independence as a shared resource for the benefit of all. This community was small and homogenous enough to allow for decision making that was both consensual and reasonably efficient in translating agreed standards into effective technical enhancements, as well as in solving problems within the operational infrastructure. Participants in these arrangements may not have thought of themselves as being involved in 'governance' activities, as that term is often too narrowly perceived as necessarily implying government-led regulation. However, they were indeed involved in undertaking governance functions. As in any policy formation effort needing to balance the interests of stakeholders with different and sometimes conflicting interests and perceptions, the processes they were using were also inherently 'political' even if their focus was primarily on technological-oriented issues. They were political in the sense that they were about determining how different actors interact in shaping who gets what, when and how in relation to issues addressed in policy making forums.

For instance, a key point of control in the Internet infrastructure is the 'root zone file'. Who exercises control over this file and the highest-level Internet 'root servers', and under what terms, matters to many stakeholders in Internet development and use as this control underpins a number of practical and symbolic issues, such as the allocation of domain names (Mueller 2002). From the outset, the US Government through the Department of Defense was the ultimate policy authority for this file. But during the first technically-oriented phase of Internet governance, root-server administration tasks were performed routinely by the late Jon Postel, an early Internet pioneer⁶. However, there was a growing concern within the US government and among some other major stakeholders that no individual, however technically-trusted, was well positioned to take account of the broad range of governmental, social, commercial and political issues that could be substantively affected by technical Internet governance decisions. This view was a key factor that led the establishment of a more formal Internet Assigned Numbers Authority (IANA) and then to the establishment in 1998 of the Internet Corporation for Assigned Names and Numbers (ICANN), an internationally organized not-for-profit corporation based on the laws of California that is responsible for Internet Protocol (IP) address space allocation. This evolution of Internet governance structures was not well chronicled and remains highly contentious, the subject of academic and policy debates. Nevertheless, the formation of ICANN signalled a significant step towards a new phase of wider stakeholder participation in Internet governance.

⁴ Simonelis (2005) details the history of Internet governance bodies. Also, see Mueller (2002).

⁵ A large international community of network designers, operators, vendors and researchers responsible for the development and stability of the Internet's architecture

⁶ For example, in 1984 Postel became a member of one of the founding Internet governance bodies, the Internet Advisory Board. This evolved into the current Internet Architecture Board (IAB).



The emerging new multi-stakeholder model

The availability of the World Wide Web in the 1990s triggered an explosive growth in Internet use across a vast spectrum of individuals, groups, communities, commercial and not-for-profit enterprises, governments and non-governmental organizations (NGOs). Their everyday activities and strategic decisions could be affected or even transformed by the use (or non-use) of the Internet and related ICTs (Dutton 2004). However, it has only been in the 21st Century that the Internet's full impact as a global socio-economic, as well as technical phenomenon, has been realized by a broad range of actors. This has been achieved through the widespread enactment in everyday life of the much-forecast convergence of digital technologies and their diverse uses and implications, from user-generated content (UGC) to a huge range of online multimedia content, mobile consumer devices and an increasing use of embedded sensor networks to monitor the environment and movements of people, vehicles and other entities.

WSIS, and the WGIG and IGF that developed from it, signify a global recognition of the need to pay greater attention to this phenomenon. They also represent milestones in the acknowledgement of the need to take account of a broad multi-stakeholder model of global governance, including significant civil society participation⁷, when seeking to develop effective and equitable policies to meet the UN's Millennium Development Goals. The decentralized, borderless and increasingly complex technical nature of the Internet means that neither traditional inter-governmental governance processes nor purely technical governance arrangements are likely to be suitable models for the future, as they lack sufficient accountability and are open to capture – real or perceived – by special interests.

A major new challenge for Internet governance posed by the new politics of the multi-stakeholder model is to try to preserve and strengthen the so far successful insulation of the technology's essential core infrastructure from political and commercial manipulation. At the same time, appropriate processes need to be developed to address the diverse range of substantive issues and stakeholder needs raised by the increasing intertwining of the Internet and its use with wider social, economic and political issues and activities. This is a difficult challenge as it involves pressures from diverse and often conflicting viewpoints and interests, reflecting very different values and cultural and political understandings. For instance, such conflicts include: governments seeking to empower and safeguard or exploit and subjugate their citizens; enterprises wanting to promote locally-driven development or dominate and manipulate new markets; users seeking creative benefits or defensive protection from their online connections; and experts striving to maintain the integrity of the architecture or undermine it maliciously.

The impacts of real-world political issues in Internet governance is illustrated by a current debate on 'network neutrality', a fundamental Internet design principle aimed at creating a network that provides e2e routing without inspecting or changing the

⁷ For instance, the (Cardoso 2004: 3) report to the UN Secretary-General on strengthening UN systems concluded: 'The rise of civil society is indeed one of the landmark events of our times. Global governance is no longer the sole domain of Governments. The growing participation and influence of non-State actors is enhancing democracy and reshaping multilateralism. Civil society organizations are also the prime movers of some of the most innovative initiatives to deal with emerging global threats'



data being carried. In the US, network neutrality has recently become a hotly contested area among telecommunications infrastructure suppliers, Internet Service Providers (ISPs), media content corporations, consumers, regulators and others because some infrastructure suppliers are seeking to gain commercial advantages by creating tiered services that charge differential rates for access to its channels for different types of content (e.g. on-demand video). Continuing global and inter-governmental debate over who should 'own' or most influence the Internet root servers also indicates how apparently technical issues can have much wider social, economic or political significance.

The OII WSIS seminar series also highlighted important issues relating to the politics of civil society representation in multi-stakeholder forums and policy making, for instance in terms of clarifying who comprises civil society, how different interests are represented, how conflicts between different interests can be resolved and the degree to which support is given to enable civil society to have a meaningful influence on actual policy outcomes (e.g. see Cammaerts and Carpentier 2005; Padovani and Tuzzi 2005).

Addressing the diversity of Internet governance issues and stakeholders

As Internet governance processes have moved from being the preserve largely of a technical elite towards a wider ownership of the substantive issues that could be affected by Internet development, availability and use, the politics involved have become more critical, more global and more diverse. This is indicated by the multi-layered, complex and generally highly distributed nature of Internet governance. It is useful to understand that the Internet itself is not one technology, but an assembly of many at different levels. Similarly, governance is not one process, but several at different levels and in overlapping arenas addressing specific issues. This means different government models and agencies, involving many different institutional, group and individual stakeholders, will continue to be needed to address different governance issues.

Such diversity poses one of the greatest threats to Internet governance: that the emerging 'Internet governance mosaic' (Dutton and Peltu 2005) will become too complex to coordinate effectively if it fragments into too many different social, cultural, economic, technical, application, and governance specializations. The sound establishment of the IGF's foundations was an important move towards building a 'light-touch' framework that could help to understand and maintain a 'big picture' coherence that can avoid an unmanageable fragmentation of the Internet governance mosaic. IGF could develop a particularly important role in setting an agenda that helps to move the focus of Internet governance debate and policy making from the procedural structures of governance to the identification of the substantive issues involved and the key 'owners' of these issues in the real-world arenas where practical outcomes are shaped through interactions between relevant decision-makers.

A key aim in this coordination process would be to ensure substantive issues are not neglected and a balance of interest and effort is maintained across the Internet governance spectrum. Table 1 illustrates a proposed framework for classifying Internet government issues, particularly in relation to development. This offers a



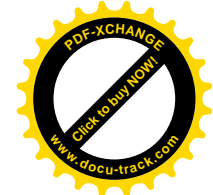
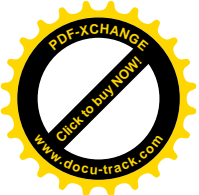
potentially productive way of categorizing diverse governance issues into more manageable chunks within a big picture that ties them together.

Table 1: Classification of Internet governance for development issues

<i>Type</i>	<i>Key issues</i>	<i>Examples relevant to development</i>
I: Internet Centric	Protection and advancement of the Internet's core open architecture and operational infrastructure, including the preservation of its independence from undue influence by particular stakeholders. Smooth evolution of efficient, reliable, secure core Internet architecture and operations. Timely adaptability to continuing and often rapid technological and other changes affecting the Internet.	<ul style="list-style-type: none"> • Global standards setting to enable equitable access to the Internet and World Wide Web. • Assignment of Internet addresses and routing of data traffic in ways that do not privilege certain countries, enterprises or other stakeholders. • Maintenance of stability of Internet Protocol (IP) to allow innovations (e.g. wireless technologies) that can assist disadvantaged areas and groups.
II: Internet-User Centric	How use or misuse of the Internet is regulated and policed within local, regional, national and international levels and jurisdictions in ways that safeguarding users' interests while avoiding the stifling of adaptability to rapid change and user creativity that has propelled the Internet's growth.	<ul style="list-style-type: none"> • 'Network neutrality' treating all Internet users and uses equitably. • Closing divides in access and user capacities to assist socio-economic development. • Free and 'open source' software. • Consumer protection for users. • Violations of users' privacy. • Cybercrimes (e.g. online fraud). • Viruses and other 'badware'.
III: Non-Internet Centric	Policy and practice anchored in local and international bodies and jurisdictions not concerned primarily with Internet-related issues. The main issues here concern the intersections between wider governance processes and Internet infrastructure development and use. Covers a vast range of socio-economic issues.	<ul style="list-style-type: none"> • Closing digital divides other than in Internet access (e.g. relating to wealth, age, gender). • Supporting cultural and linguistic diversity. • Freedom of expression and communication (e.g. degree, or absence, of political or commercial control over content). • Copyright, intellectual property rights (IPR), trademarks.

Source: Developed from Table 1 in Dutton and Peltu (2005: 7)

There are many overlaps and much interaction between the three governance types in Table 1 because of the growing intersection between what happens in the Internet's cyberspace and wider policy issues and behaviour in the real world. For instance, unwanted spam e-mail can raise serious concerns in all three types: spam that disables a Web sites affects the Internet-centric level; Type II issues include the fraudulent solicitation of money through spam; and at the wider Type III level digital divides can be exacerbated because the extra costs and special high-tech resources required to deal with and prevent spam are unevenly distributed among different countries, regions and social groups. The names and numbers given to Internet entities may seem to be a clear Type I issue to be managed by ICANN, but the registration of a trade (or service) mark as a domain name with the intention of



selling it back to the owner, called 'cybersquatting', has led to governance issues that are also the concern of Type III international organizations, like the World Intellectual Property Organization (WIPO), and national and international legislation and regulations that cover more traditional trademark concerns.

The way this cybersquatting issue was addressed demonstrates that it is possible to coordinate a coherent response to overcome fragmentation, provided the relevant governance bodies are aware of the problem and are willing to collaborate to achieve a mutually-acceptable approach. This solution came through an administrative dispute resolution mechanism, the Uniform Domain Name Dispute Resolution Policy (known as UDRP)⁸. Policies for this were developed by WIPO in consultation with relevant stakeholders and agreed by its Member States, but their implementation is dependent on ICANN.

The interdependence of Internet governance and development

Helping to understand why Internet governance is relevant to development

The concept of Internet governance may be only hazily understood (or misunderstood) by many people, which means large numbers of those who could be affected by such governance decisions are unaware of their relevance until the outcomes of the decisions directly affect their own activities. For instance, although certain civil society organizations were active in the WSIS, many potential participants were absent, including some significant players in the development sphere. A key reason for this seems to be that the absent organizations did not seem to be aware of, or understand why, the Internet or 'information society' should be a priority concern in their own areas of concern.

The WSIS seemed at times to separate artificially Internet governance from development issues, rather than seeing them as separate but interrelated fields. An important role for a coordinating body like the IGF could be to highlight this interdependence by alerting existing development agencies and affected stakeholders to the Internet governance issues of intrinsic relevance to their development activities, but which may be obscured to them by the opaqueness to non-experts of some key innovations in the Internet and related digital technologies. This could also involve seeking to establish, where necessary, appropriate new institutions, processes and links where none exist for particular substantive issues.

Broadening the digital divides agenda

An important way of trying to interest more development stakeholders in Internet governance could be to move debates on ICT for development away from their focus on 'the' digital divide in access to ICT infrastructure and systems (e.g. see Dutton et al 2003), and a consequent focus on a fund to address global inequities⁹, to a broader view of the many important differential impacts of use that may affect disadvantaged countries, regions and groups. This narrow focus on the access divide has led some policy makers and researchers to announce that 'the digital

⁸ See <http://www.icann.org/dndr/udrp/policy.htm>

⁹ Within the WSIS, this became known as a voluntary Digital Solidarity Fund (see www.dsf-fsn.org).



divide is over', making it seem that there is perhaps little left to do in Internet governance to assist development.

A draft report from the World Bank (2005), for example, suggested that the global digital divide is narrowing at a faster rate than expected, using a statistic such as the 77 percent of the world's population estimated to be under the 'signal footprint' of a mobile provider. However, this identifies only potential users and social research in this field (e.g. Norris 2001; Dutton, Shepherd and di Gennaro 2006) is increasingly showing that there is not just one 'access divide'. Instead, there are actually many divides based on multiple social, economic, cultural, geographic, political and other dimensions. These follow and reinforce similar socioeconomic divides across and within societies, as well as creating new ones, such as across generations. The closing of a divide in physical access can also mask growing and newly-opening divides in other aspects affecting the same groups, which explains how a gender gap and a digital divide in the use of technology in paid and unpaid work, leisure, study and employment remain significant, although the physical ICT access gap between genders is narrowing (Liff et al 2004).

The kind of Internet governance agenda that has been favoured in developed western countries, which has sometimes focused on market liberalization as the prime solution to 'the' divide in access, also needs to be widened to take account of the specific needs of developing countries and regions. For instance, governments in developing countries are often a major source of ICT knowhow, infrastructure development and capacity building, together with the private sector, universities and NGOs. Such governments also generally view Internet access as a key to many economic and social development areas. It is unrealistic to expect these governments to stand aside from active participation in Internet governance processes, as some would prefer. Given developing countries' financial, political, cultural and other constraints, building a better understanding between them and developed countries could also be valuable in addressing Internet-related regulations affecting key non-Internet centric areas, such as freedom of speech, human rights and IPR.

The technological scope at the core of a broad conceptualization of 'digital divides' should also be widened from a focus on the Internet and PCs to include the continuing stream of other ICT innovations (e.g. mobile phones, iPods, UGC) and options for mediated access to ICTs (e.g. via help centres or over-the-counter services). The value that can be gained from applying still-relevant older technologies, often in conjunction with the latest ICTs,¹⁰ should also be supported.

Revealing the dynamics of multi-stakeholder decision making

Dutton (2004) has defined an approach that can help to understand the real-world contexts and interactions shaping outcomes from Internet governance processes. This is based on the concept of an 'ecology of games', where a 'game'¹¹ is defined

¹⁰ For instance, the Kothmale Community Radio and Internet Project (www.kothmale.org) integrates radio and Internet services. This includes allowing listeners to send questions to the radio station. Staff at the station obtain answers from the Internet and broadcast them over the radio.

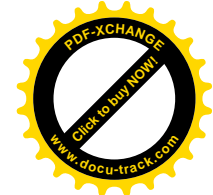
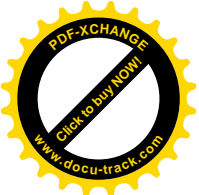
¹¹ The term 'game' is used here only in this sense and should not be seen as trivializing an arena by suggesting it is like a sporting or entertainment game.

an arena of competition and cooperation structured by a set of rules and assumptions about how to act to achieve a particular set of objectives. Internet governance can then be seen to be the outcome of a variety of choices made by many different players involved in separate but interdependent governance games. A few such games related to development are illustrated in Table 2.

Table 2. Selected games shaping Internet governance for development

<i>Type</i>	<i>Game</i>	<i>Main players</i>	<i>Goals and objectives</i>
I: Internet centric	Transnational jurisdictional governance 'turf struggles'	Governments, regional entities, Internet and other governance agencies (e.g. IGF, ICANN, WIPO), experts	Participation in governance bodies to gain or retain, limit or expand control over Internet resources (e.g. the root servers).
	Names and numbers	Individual experts, ICANN, Registries, ISPs, users	Obtain, sell, allocate domain names, etc. for sites, servers, users.
	Standards	Standards-setting bodies, experts, governments, users	Establish and propagate Internet standards for stable Internet evolution.
II: Internet-user centric	Network neutrality	Telecom infrastructure suppliers, ISPs, content providers, consumers, media businesses, regulators, civil society activists, lawyers, public-policy makers.	Negotiate terms of access to Internet content, taking account of different stakeholder views (e.g. on social equity, development, free markets, Internet open e2e design principles).
	Free and open source software (F/OSS)	Activists favouring free software, commercial proprietary software producers and distributors, users.	Promotion of software development and distribution models that prioritize social equity or free market goals.
	Privacy and data protection	Governments, citizens, regulators, private firms, lawyers, journalists, civil liberties activists	Prevent or seek disclosure of personal data depending on negotiated or imposed criteria.
III: Non-Internet centric	Digital divides	Governments, NGOs, local activists, special-interest groups, local communities, investors	Close socio-economic, health and other divides by the effective use of the Internet and related ICTs.
	Copyright, digital rights management	Legislators and regulators, creative industries and other content providers, telecom suppliers, ISPs, ICT vendors.	Negotiate access and rights terms to balance players' goals (e.g. low-cost access for consumers; highest return on assets for content creators and suppliers).
	Freedom of expression	Political and religious activists, writers, artists, media rights advocates, news media, bloggers, governments, censors	Individuals, groups, organizations aim to facilitate or constrain the expression and exchange of certain viewpoints.

Source: Adapted from Table 2 in Dutton and Peltu (2005: 9-10)



The ecology of games concept illustrated in Table 2 indicates that no single set of actors actually seeks to control governance as such, but that each player pursues more focused goals in collaboration or competition with other actors. For example, actual goals could be: 'creating an equitable market for registering and managing Internet names' (Type I); 'enhancing socio-economic development by promoting equity of Internet access' (Type II); or 'closing wealth divides with the help of Internet use' (Type III). Actors could own all these goals, while at the same time participating in 'Internet names and numbers', 'Internet diffusion' and 'economic development' games.

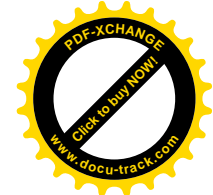
Conclusion: Focusing on key Internet governance issues

Setting the agenda

The digital convergence that eventually became a reality in the 21st Century has accelerated pressures to develop a multi-stakeholder governance model. Nevertheless, many Internet experts have also argued that 'governance' is irrelevant to the Net, although as indicated in this paper related governance structures and processes have been co-evolving since its inception as its ever-widening user base and socio-economic real world entanglement has grown. Such views may reflect experts' anxieties about losing their traditionally strong influence over what were primarily Type I Internet governance issues. It should be remembered that, although the roots of the Internet go back many decades, we are still in relatively early days of understanding and addressing key issues raised by widespread digital convergence. This is indicated by the uncertainty among some participants at the first WSIS in 2003 about what the Internet actually meant to them, let alone an understanding of the more complex notion of 'Internet governance'.

Given the growing demand for widening multi-stakeholder participation across an expanding range of diverse Internet governance issues, this paper has argued that the next steps in global and national Internet governance should be to focus on identifying the key substantive issues and their most relevant fora, while developing coordination processes to ensure all issues are addressed in the most appropriate forums for their effective resolution. Just because an issue is important to the future of the Internet doesn't necessarily mean it should be addressed by a body focused on Internet governance as such. But it is important that those stakeholders closest to an issue are engaged in their arena's governance process in ways that take account of relevant Internet dimensions. Those issues for which there is no adequate mechanism to deal with Internet aspects should be brought to the attention of relevant stakeholders who have legitimate jurisdiction over the substantive issues, while new forums or institutions should be created to deal with substantive issues that do not yet have a 'home', such as those tied to emerging new ICTs and the socio-economic transformations tied to them.

The paper explains why the IGF is in an excellent position to play a pivotal coordinating role in shaping and lightly guiding such an approach. It also outlines a framework for helping to classify Internet governance issues to assist identify and prioritize issues on the global Internet governance agenda that could help to promote development. It has also highlighted the importance of recognizing the inherently political nature of Internet governance processes, which obviously include those involved in the identification of such issues.



The political scientist E. E. Schattschneider (1960: 2) once compared political conflict to a fight: 'Every fight consists of two parts: (1) the few individuals who are actively engaged at the center and (2) the audience that is irresistibly attracted to the scene... The outcome of every conflict is determined by the extent to which the audience becomes involved in it.' Contestants with a clear lead in such a conflict might well try to defend the status quo by keeping their own side intact while keeping the spectators in the stands. In contrast, losing contestants can change the odds by dividing their opponents or drawing spectators into the game¹². Given the importance of agenda setting in the policy process, the IGF could have a major role to play in shaping the future of Internet governance.

Research to support issue-based multi-stakeholder Internet governance

The approach recommended in this paper could be supported well by research that offers both practical and conceptual insights relevant in the areas discussed¹³. The kinds of issue-based policy research most likely to be of value in this context include technical advances in design, empirical studies of actual uses¹⁴ and action research¹⁵ based on a strong scholarly grounding for analysing experimental uses of the Internet. Research on Internet governance itself could support the institutionalization of governance structures and processes. Good empirical data and evidence-based analyses would enable researchers to work with policy makers and practitioners to identify and evaluate the priorities that are most likely to lead to sustainable strategies and institutions to assist in meeting development goals.

Improved understanding, including through targeted research, can also offer effective responses to key concerns of civil society participants in multi-stakeholder policy and decision making processes (e.g. use of the technology to assist disadvantaged areas and groups by closing socio-economic divides or promoting information rights.) Academic researchers could play a valuable role in helping to understand the nature and dynamics of the politics of such civil society representation, which is a vital issue for the IGF in its engagements with such representatives. Researchers could also help to articulate 'grassroots' user and social requirements to policy makers and product, system and service designers and developers.

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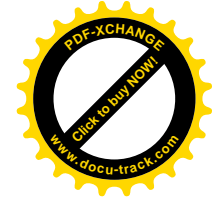
Cammaerts, B. and Carpentier, N. (2005), 'The Unbearable Lightness of Full Participation in a Global Context: WSIS and Civil Society Participation', in

¹² This discussion draws from Dutton (1999): 83-84.

¹³ An example of efforts to develop networks of academics involved in research related to Internet governance is the Global Internet Governance Academic Network (GIGANet), proposed at an International Association for Media and Communication Research (IAMCR) conference in June 2006 in Kurort Rathen, Germany (see www.cipaco.org/article.php3?id_article=835). The GIGANet Startup Group including Wolfgang Kleinwächter of the Department of Media and Communication Sciences at the University of Aarhus and Peng Hwa Ang of the School of Communication and Information of Nanyang Technological University of Singapore

¹⁴ For example, the World Internet Project covering over 20 countries (www.worldinternetproject.net), including the OII's Oxford Internet Surveys (OxIS) in Britain (www.oii.ox.ac.uk/research).

¹⁵ An example of such action research is StopBadware.org, an initiative run by the OII and Berkman Center for Internet and Society to provide practical defences against malicious software programs (www.StopBadware.org).



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