

# Internet Society Submission

## ITU World Conference on International Telecommunication Regulations (WCIT-12)

### Introduction

The Internet Society (ISOC) is a non-profit organization dedicated to ensuring the open development, evolution, and use of the Internet for the benefit of all people throughout the world. Since 1992, ISOC has served as a global clearinghouse for technically sound, unbiased information about the Internet, as an educator, and as a focal point for a broad based community of interest engaged in Internet-related initiatives around the world. It provides the organizational home for the Internet Engineering Task Force (IETF), Internet Architecture Board (IAB), and the Internet Research Task Force (IRTF).

As a Sector Member of the ITU Telecommunication Standards and Telecommunication Development Sectors, ISOC respectfully submits this contribution to the ITU as part of the WCIT public consultation. We commend the ITU Secretariat and the ITU Council for taking action to allow public input into the WCIT process. We think this is an important way to encourage inclusion of differing opinions as part of an open and healthy policy discussion. Through our Sector Membership, we have participated in the Council Working Group on WCIT and regional and national dialogues on the ITRs over the past several years with the aim of making a constructive contribution to the work of the Conference.

The Internet Society remains hopeful that the ITU Member State delegations to the WCIT will agree to a treaty that enhances rather than restricts international telecommunications. As the Chair of the Internet Society Board of Trustees recently stated,

The Internet Society believes that the International Telecommunication Regulations should contain high level principles and that revisions should focus on things that have clearly worked in the field of global communications: competition, privatization, and transparent and independent regulation. It is our sincere hope that revisions to the ITRs will not interfere with the continued innovation and evolution of telecommunications networks and the Internet.”<sup>1</sup>

Our contribution to the WCIT strives to outline a positive way forward for the ITRs; to emphasize the things that have worked in the field of telecommunications; to make a case for why the Internet should not fall within the scope of the ITRs; and, to highlight specific proposals where the Internet Society has strong positions. We contribute to this process with a strong hope that the results of the WCIT will enable the continuing growth and innovation of international telecommunications but also with significant concerns that, if care is not taken, the outcome of the WCIT could undermine the innovative potential of networks worldwide.

<sup>1</sup> Internet Society. [Internet Society Board of Trustees Expresses Concern about the Potential Impact of the World Conference on International Telecommunications on the Internet](#). August 2012.

“It is our sincere hope that revisions to the ITRs will not interfere with the continued innovation and evolution of telecommunications networks and the Internet.”

*Chair, ISOC Board of Trustees.*

We respectfully request ITU Member States' consideration of the Internet Society's contribution and we stand ready to play our part in the process and to assist governments as they prepare for this important conference.

### **Changes since 1988**

Since 1988, the technology, providers, users, and regulators of telecommunication networks and services have changed in ways that would have been unimaginable to delegates who attended the World Administrative Telegraphy and Telephone Conference (WATTC) in Melbourne. A wave of privatization and competition in the 1990s replaced many of the traditional government monopolies that dominated the international telecommunications landscape in 1988, paving the way for lower prices, new services, and greater connectivity. Regulatory reforms like the introduction of independent regulators, rules to promote and safeguard competition, and greater transparency in the regulatory process have all served to benefit the public interest and contributed significantly to the growth in telecommunications the world over. In 2011, an Analysys Mason report underscored the importance of competition and transparent policy frameworks in supporting broadband deployment in Sub-Saharan Africa.<sup>2</sup> Indeed, the 2010 ITU-D Hyderabad Declaration emphasized the role that fair, transparent, stable, predictable, and non-discriminatory legal and regulatory environments have in promoting competition and affordable access<sup>3</sup>. WCIT-12 is an opportunity to build on the 1988 ITRs and to apply the lessons learned in the years since then to further expand access to international telecommunications infrastructure.

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There is still more work to be done to lower connectivity costs and to expand the benefits of communications to all people, and to this end there are many important policy lessons we can learn from the past 25 years. The concepts of competition, regulatory independence, and the engagement of all stakeholders in transparent governance would be an excellent starting point for any revision to the treaty. Further, the ITRs should enshrine a commitment to the use of open and voluntary international standards in support of global interoperability. Finally, we note that the 1988 ITRs were short, concise, and at a sufficiently high level to serve the Member States of the ITU for nearly a quarter of a century without being revised. We encourage ITU Member States to retain the high level nature of the ITRs and resist the temptation to lock in specific business or commercial models, technologies or regulatory approaches that will likely not withstand the test of time.

### **The Internet is Different**

People around the world have come to interact and communicate in ways that were unimaginable to negotiators at WATTC. Although the Internet was already nearly 20 years old in 1988, it was still a little known research-driven network with limited impact on the world's population. Since 1988, the Internet has grown into a major force in the world's economic and political systems, as well as in how people live, work and play. With over 2 billion users worldwide, the Internet still has huge capacity for growth and users have tremendous opportunities today to leverage the technology to develop game-changing innovations that could radically change the communications landscape once again. In economic terms, a recent report from McKinsey noted that the modern Internet is integral to GDP growth, economic modernization, and job creation, generating over 10 percent of GDP growth in the past 15 years in the countries studied.<sup>4</sup> The

<sup>2</sup> Analysys Mason. [Driving Broadband Connectivity In Africa: Regulatory Issues And Market Challenges](#). December 2011.

<sup>3</sup> International Telecommunication Union. [World Telecommunication Development Conference, Hyderabad Declaration](#). June 2010.

<sup>4</sup> McKinsey Global Institute. [The Internet Matters: The Net's Sweeping Impact on Growth, Jobs and Prosperity](#). May, 2011.

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UNESCO and ITU-organized Broadband Commission's recent report highlighted the myriad of ways that broadband access is transforming education, health, government services, and finance.<sup>5</sup> And yet, in many ways, society is only on the cusp of fully recognizing and integrating the Internet's full potential.

The Internet Society fundamentally believes that the growth of the Internet is *good* for humanity. Globally interconnected networks have empowered citizens, transformed economies and brought enormous benefits to communities worldwide. The expansion of telecommunications networks throughout the 1980s and 1990s combined with the ingenuity of the technical community, the liberalization of policy frameworks worldwide, and a competitive marketplace for new communication services all have contributed to the success of the Internet.

At the same time, we that recognize greater global connectivity has raised a host of new policy challenges for governments. Clearly, developing countries face very real economic challenges in bridging the digital divide. Throughout the WCIT preparatory process, governments have raised important concerns about spam, security, and connectivity costs. We understand and, in some cases, share these concerns; however, we do not believe that a binding intergovernmental treaty is the best mechanism to solve these complex and evolving issues. The reality is that technology moves faster than any treaty process ever can. It is also important to recognize that there is rarely a one-size-fits-all solution to the kinds of policy challenges outlined above. Local policy environments, market conditions, and the development context are important factors in any policy process. Solutions need to work locally.

In light of this, we encourage governments to work through a multistakeholder process to develop flexible policy solutions that both support innovation and stand the test of time. In our experience, global, regional, and national Internet policies that work harmoniously *with* the Internet are more effective in developing solutions that are both responsive and effective. Policymakers, the Internet community, the donor community, industry, civil society and users all need to work together to tackle these challenges.

Some have questioned whether the modern Internet is sustainable in light of ever-increasing demands for new data intensive services, whether there remain sufficient incentives for further investment, and assuming the negative, wonder whether the WCIT provides an opportunity to address these challenges through regulation. There have been assertions that new global regulations are needed in order to preserve the revenue streams for some players and to prevent an impending collapse of the global Internet. These are not new claims. Indeed, fears about the sustainability of the Internet have come and gone over the history of the Internet as market forces bring about new kinds of investments, pioneering technologies, and innovative business models. It is the very nature of the Internet – a distributed and open network of networks – that enables this kind of innovation and evolution. Indeed, as a recent report by the OECD on Internet traffic exchange concludes, “the Internet model of traffic exchange has produced low prices, promoted efficiency and innovation, and attracted the investment necessary to keep pace with demand”.<sup>6</sup> The last thing governments should do is lock-in a regulatory approach that may have significant and unpredictable negative consequences for the ability of networks to evolve, for new services to come about, for new businesses to be formed worldwide.

In short, the Internet Society does not believe that a new treaty-based global regulatory approach that seeks to regulate how IP networks are managed, to alter network architecture, and/or to

<sup>5</sup> Broadband Commission. [The State Of Broadband 2012: Achieving Digital Inclusion For All](#). September, 2012.

<sup>6</sup> OECD. [Internet Traffic Exchange: Market Developments and Policy Challenges](#). October 2012

determine how commercial agreements between network operators should be conducted is good for the long term prospects of a global, open Internet that benefits everyone.<sup>7</sup> Rather, policymakers should focus on policy approaches that have clearly worked to enable the growth in communications to date – competitive markets, liberalization, reliance on open standards, support for the free flow of information, and multistakeholder dialogue.

### **Internet Society Perspectives**

While we think that there may be opportunities for useful revisions to the ITRs to reflect changes in the international telecommunications sector since 1988, we have deep concerns that some of the proposals to the WCIT would have serious negative implications for the global Internet. In our view, it is impossible to draw analogies between the traditional Public Switched Telephone Network (PSTN) and the Internet because the basic concepts, architecture, and operation are very different. The current ITRs were produced with the PSTN in mind. By explicitly or implicitly extending some of the current articles and related approaches to cover the Internet, and, using seemingly similar terms and concepts, there is a great danger of misinterpretation and confusion.

In this regard, we have identified a number of proposals that we believe could undermine the security, stability, and innovative potential of networks worldwide. Yet there are also some proposals and updates to the treaty that we believe could enable growth and support continued innovation. Below, we outline the Internet Society's position on several key proposals that have been submitted to date. This list is not inclusive of *all* proposals on which the Internet Society may have views.

#### **Scope of application of ITRs – Operating Agency / Recognized Operating Agency**

Recognizing that the ITRs are a binding treaty between ITU Member States, the Internet Society believes that the ITRs and the obligations they convey should only apply to Member States as signatories to the treaty. Further, we believe that replacing the current term “Recognized Operating Agencies” with the term “Operating Agencies” throughout the ITRs would broaden the scope of the treaty to a wide range of companies and services not currently covered by the regulations.

*ISOC supports application of ITRs to Member States and use of the term Recognized Operating Agency.*

#### **Voluntary Nature of ITU-T Recommendations**

The Internet Society believes that all ITU-T Recommendations should continue to be voluntary and should not be elevated to a mandatory status or codified in any treaty. Further, we believe that voluntary open standards processes built on cooperation, consensus, transparency and due process are the most effective way to support interconnection and interoperability.

*ISOC supports: MOD 1.4 References to ~~CCITT~~ ITU-T Recommendations in these Regulations are not to be taken as giving to those Recommendations the same legal status as the Regulations.*

#### **Private Commercial Arrangements**

The Internet architecture does not conform to national boundaries. The ITRs should recognize that the global interconnection marketplace is highly diverse, constantly changing, and driven by

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<sup>7</sup> Internet Society. [Internet Interconnections Proposals For New Interconnection Model Comes Up Short](#). 2012.

contractual commercial agreements between operators as well as by technological changes. Together these factors contribute to a highly flexible global Internet interconnection market where IP traffic moves via the most commercially efficient route possible.

*ISOC supports MOD 1.5... the provision and operation of international telecommunication services in each relation is pursuant to mutual agreement between Administrations **Recognized Operating Agencies**.*

We do not support international, treaty-level regulation of private commercial agreements. Countries need the flexibility to set domestic policies that reflect local market conditions rather than locked-in, one-size-fits-all, global regulations that may have broad, unintended consequences. There are, in fact, many standards bodies involved in the technical work that facilitates interconnection - some, like the ITU-T or the IETF are global in nature while others are highly localized such as the regional Network Operator Groups. It is also the case that there is a tremendous amount of interaction and collaboration between the various groups, all in support of global interconnection and global interoperability.

*ISOC does not support new provisions to regulate IP interconnection via the ITRs (i.e. new definitions in Article 2 and new provisions related to IP interconnection in Article 3, 4 and 6).*

#### **Definitions of Telecommunication and International Telecommunication**

The Internet Society believes that the definitions of “telecommunication” and “International Telecommunication” should not change. These terms have been clearly defined within the ITU context as part of the ITU Constitution and Convention.

*ISOC supports NOC 2.1 and 2.2.*

#### **Addition of ICT to the ITRs**

Adding ICT (telecom/ICT) throughout the treaty could significantly broaden the scope of the treaty beyond international telecommunications networks. As ITU Resolution 140 notes, the term ICTs is not defined in the ITU context. In fact, study activities in the ITU-D have begun in order to craft a working definition of ICTs. In particular, we are concerned that the term ICTs could be understood to include IP networks, content, equipment, and services which would not be appropriate or even workable in the ITRs.

*ISOC does not support inclusion of a new term, Telecommunication/ICT in the ITRs.*

### **Addition of provisions related to spam**

ISOC understands that spam continues to be a technical, economic and security challenge for many countries, and we have prepared an information sheet that includes a sampler of policy and technical resources for countries to use should they wish to tackle this difficult problem.<sup>8</sup> We do not, however, believe that it is appropriate to include issues related to spam in the treaty, as this would dangerously extend the treaty into areas of content, potentially impacting free expression online.

*ISOC supports multistakeholder approaches to spam rather than treaty provisions.*

### **Role of competition**

Competition in the provision of international telecommunications services has been a key driver in lowering network connectivity costs and expanding access worldwide. The Internet Society believes that it would be useful to include concepts of competition and market liberalization in the updated treaty.

*ISOC Supports MOD 3.2 Administrations ~~shall endeavor to provide~~ **Member States shall endeavor to provide** encourage the provision of sufficient telecommunication facilities to meet the ~~requirements of~~ **and demand for international telecommunication services** *inter alia* **through the fostering of competitive and liberalised telecommunication markets.***

### **Quality of Service**

A number of proposals for new ITR provisions or modifications to existing provisions (i.e. Articles 3.1, new 3.1b, 3.4, new 4.7) related to quality of service suggest that internationally mandated network management and configuration parameters/standards will allow for network development, better traffic management and routing, and will bring down costs. To the extent that these proposals relate to quality of service on the Internet, we note that the Internet architecture and traffic flows are not architected like circuit switched telecommunications networks. Proposals to overlay architectural and traffic flow standards/parameters on the Internet would fundamentally change the nature of interconnection and transport and increase the cost of traffic termination.

*ISOC does not support proposals in Article 2, 3 or 6 to define or mandate IP interconnection quality of service.*

### **Traffic Routing**

Some proposals suggest that Member States have the right to know how traffic is being routed to their countries. To the extent that these proposals refer to Internet traffic routing, ISOC reiterates the point that routing in the Internet does not conform to national boundaries and is very dynamic by nature, which is the basis of its resiliency. Networks often span across national boundaries, and data packets usually cross three-to-five networks leaving no footprint on the networks travelled over to reach their destination.<sup>9</sup>

*ISOC does not support ITR regulations as applied to IP traffic routing.*

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<sup>8</sup> Internet Society. [Combating Spam: Policy, Technical and Industry Approaches](#). October 2012.

<sup>9</sup> Internet Society. [Internet Interconnections Proposals For New Interconnection Model Comes Up Short](#). 2012

### **Naming, Numbering and Addressing**

A number of Member States have identified issues related to telephone number misuse as a key issue for the WCIT. ISOC understands that ITU-T Study Group 2 has done significant work to address the misuse of E.164 numbers, including producing the E.157 Recommendation on International calling party number delivery.<sup>10</sup> However, other proposals to the WCIT appear to address issues beyond the resources for which the ITU has responsibility, namely, E.164 numbers. The proposed inclusion of the term ICT into the treaty further underscores our concern that WCIT proposals related to naming, numbering and addressing would, in fact, extend the scope of the treaty to include Internet naming, numbering and IP addressing resource management. In some cases, proposals explicitly call for government control of these resources. We note that resource management for Internet naming, numbering and addressing has well-established, multistakeholder governance structures and policy development processes. The Internet Society does not support ITR Regulations related to Internet naming, numbering or addressing.

*ISOC supports: ADD 3.4 Member States should encourage the appropriate use of those numbering resources which are the responsibility and remit of the ITU, in order that they are used only for the purposes for which they were assigned. Member States shall endeavour to ensure that resources, which are the responsibility and remit of the ITU, are not used until they are assigned.*

### **Cybersecurity**

Policymakers are understandably focused on issues related to the security, stability, and reliability of the communications infrastructure. However, security is a multi-faceted issue that brings together a host of stakeholders, including the technical community, industry, civil society, end-users, regulators, law enforcement, etc. Thus, we do not believe that the ITRs are the place to settle issues related to cybersecurity. Consistent with our view that the ITRs should remain high-level, it is possible for the treaty to recognize the need for Member States to cooperate with *all* stakeholders to address telecommunications network security. In the end, any text in the ITRs related to security should be narrowly focused on international telecommunications networks, should not involve content or information security, should avoid topics related to law enforcement or national security, and should be fully consistent with Member State commitments under the UN Declaration on Human Rights.

*ISOC only supports inclusion of provisions in the ITRs as related to furthering the robustness of international telecommunication networks. Proposals related to national defense, national security, content, and cybercrime should be out of scope for the ITRs.*

### **Conclusion**

The Internet Society hopes this contribution is useful for Member States as they prepare for the WCIT. Our delegation looks forward to having opportunities to interact with Member State delegations during the course of the Conference and to a successful outcome of the WCIT.

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<sup>10</sup> International Telecommunication Union. [ITU-T E.157, International Calling Party Number Delivery](#). November 2009.

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## About the Internet Society

The Internet Society (ISOC) is a non-profit organization founded in 1992 to provide leadership in Internet related standards, education, and policy. With offices in Washington, D.C., Geneva, Switzerland, and 10 other countries, it is dedicated to ensuring the open development, evolution, and use of the Internet for the benefit of people throughout the world. ISOC is also the organizational home of the Internet Engineering Task Force (IETF), the Internet's premier technical standards body.

Internet Society  
1775 Wiehle Avenue,  
Suite 201  
Reston, VA  
20190-5108 U.S.A  
Tel: +1-703-439-2120  
Fax: +1-703-326-9881

Galerie Jean-Malbuisson 15  
CH-1204 Geneva  
Switzerland  
Tel: +41 22 807 1444  
Fax: +41 22 807 1445

Email: [info@isoc.org](mailto:info@isoc.org)  
<http://www.internetsociety.org>