|  |
| --- |
|  |
| Geneva, 14-16 May 2013 |
| **Document WTPF-13/INF/8-E  26 April 2013  English only** |

Information Document

# Defining the Internet

Source: Richard Hill, APIG - Member of Informal Expert Group

In order to discuss “the Internet” one should first define what is being discussed. Indeed, a group of Internet experts has suggested that processes must be set up wherein key characteristics of the Internet can be articulated, whereby its unique strengths can be recognized and thereby allowing developments that may affect its special nature and strengths to be readily recognized.[[1]](#footnote-1)

**1 Narrow definitions**

In its submission[[2]](#footnote-2) to the World Conference on International Telecommunications, the Russian Federation proposed to define Internet as:

“An international conglomeration of interconnected telecommunication networks which provides for the interaction of connected information systems and their users, by carrying their traffic using a single system of numbering, naming, addressing, identification, protocols and procedures that is defined by Internet Standards.”

This definition, which was never discussed at WCIT, much less agreed, refers only to the network itself, not to the services and applications offered on top of the network.

Wikipedia takes a similar approach, since it describes Internet as[[3]](#footnote-3):

“The **Internet** (or [**internet**](http://en.wikipedia.org/wiki/Internet#Terminology)) is a global system of interconnected [computer networks](http://en.wikipedia.org/wiki/Computer_network) that use the standard [Internet protocol suite](http://en.wikipedia.org/wiki/Internet_protocol_suite) (*TCP/IP*) to serve billions of users worldwide. It is a *network of networks* that consists of millions of private, public, academic, business, and government networks, of local to global scope, that are linked by a broad array of electronic, wireless and optical networking technologies. The Internet carries an extensive range of information resources and services, such as the inter-linked [hypertext](http://en.wikipedia.org/wiki/Hypertext) documents of the [World Wide Web](http://en.wikipedia.org/wiki/World_Wide_Web) (WWW) and the [infrastructure](http://en.wikipedia.org/wiki/Information_infrastructure) to support email.”

Again, this definition refers only to the network itself, not to the applications that run on the network. To make this clear, Wikipedia states “the Internet is a particular global computer network connecting millions of computing devices; the [World Wide Web](http://en.wikipedia.org/wiki/World_Wide_Web) is just one of many [services](http://en.wikipedia.org/wiki/Internet_Services) running on the Internet”.

**2 Broad definitions**

However, broader definitions exist. In 1995, the US Federal Networking Council defined the Internet as[[4]](#footnote-4):

“the global information system that:

(i) is logically linked together by a globally unique address space based on the Internet Protocol (IP) or its subsequent extensions/follow-ons;

(ii) is able to support communications using the Transmission Control Protocol/Internet Protocol (TCP/IP) suite or its subsequent extensions/follow-ons, and/or other IP-compatible protocols; and

(iii) provides, uses or makes accessible, either publicly or privately, high level services layered on the communications and related infrastructure described herein."

This is an extremely broad definition, since it encompasses the applications that run on top of the TCP/IP protocol as well as the hardware that is interconnected by that protocol. This broad definition would appear to correspond well to what is commonly meant by “the Internet”.

In a submission to the World Telecommunication Policy Forum, a group of Internet experts has proposed the following points as a starting point for principles that enable the Internet and its advantages to be recognized and distinguished from other terms that may designate technical concepts that are broader or more specialized in nature than the Internet platform[[5]](#footnote-5):

1. that it is defined in terms of principles of interoperation between networks,
2. that the resulting platform is a general purpose platform,
3. that it is available as a general purpose platform to end users, and
4. that it enables general purpose connectivity directly between end users throughout the globe (or beyond), to all other networks that interoperate on the same terms.

This definition is even broader than the first definition given above, since it makes no reference to the TCP/IP protocol. Indeed, this definition would apply equally well to the GSM network. Thus we will not further consider this definition.

**3 Summary**

Most discussions of Internet governance refer to the broad definition of Internet[[6]](#footnote-6) (the first one cited in 3.2 above), not to narrower definitions. Thus it would seem appropriate to use the term “Internet in its broad sense, to refer to the applications and services as well as to the network itself.

1. Draft opinion from the Internet Systems Consortium submitted to WTPF, available at: <http://www.itu.int/md/S13-WTPF13IEG3-C-0049/en> [↑](#footnote-ref-1)
2. WCIT document 27, rev. 1. [↑](#footnote-ref-2)
3. Accessed on 23 February 2013. [↑](#footnote-ref-3)
4. See footnote xv of *Robert E. Kahn and Vinton G. Cerf* **. “**What Is The Internet (And What Makes It Work)” December, 1999, available at: <http://www.cnri.reston.va.us/what_is_internet.html> [↑](#footnote-ref-4)
5. Draft opinion from the Internet Systems Consortium submitted to WTPF, available at: <http://www.itu.int/md/S13-WTPF13IEG3-C-0049/en> [↑](#footnote-ref-5)
6. Indeed the working definition adopted by the Working Group on Internet Governance (WGIG) for Internet Governance was *“Internet governance is the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet”.* [↑](#footnote-ref-6)