Mr. Chairman, Honourable Ministers, Excellencies, distinguished delegates, ladies and gentlemen, I am proud to be working with you all this week on important topics relating to the Internet. I would also like to give my personal thanks to the Indonesian hosts for having us here.

I could talk about many things today, but I wanted to focus on two important topics: future innovation and security.

We all talk about how the Internet has enabled incredible innovation, how it has pushed significant economic growth, social development, and how it has given tremendous benefit for so many users. The open and interoperable nature of the Internet technology has made this possible. When we talk about governance issues this week, it is important to think about them in terms of what the future will bring and not just today’s Internet. I wanted to highlight something that we see at the technical community and the IETF very clearly: the speed of innovation is increasing. For instance, the web protocol stack is undergoing significant change with the HTTP 2.0. Voice-over-IP is moving to browsers with WebRTC - real-time communication for the web. The Internet of Things is working its way to more and more devices. Fundamental changes in even the basic networking technology are on the way too, such as moving from IPv4 to IPv6, some of the changes we’ve implemented on TCP, and so on.

Many of these changes have fundamental impacts to Internet governance. Governing an almost limitless address space is very different from managing scarcity. Having any web server be capable of becoming a voice provider will have an impact on regulating voice calls. And I think the engineers at IETF and elsewhere have realized that they cannot work on the technology alone in all cases, and that things like emergency calls are something that we have to work on together in the larger community.

The second topic that I wanted to talk about is security. The revelations on pervasive monitoring of Internet users and traffic have obviously been a hot topic this year. I do not think we should react to specific cases, and indeed the problems are perhaps more wide-spread in the world than one would assume by reading newspapers. But our commerce, business, and personal communications all depend on the Internet being secure and trusted. So the reports about large-scale monitoring of Internet traffic and users disturbs us.

But we are taking this as a wake-up call. Since September the IETF has been discussing the topic extensively, and we will devote a big part of our time in the upcoming Vancouver meeting for it. And we are not just talking - we are looking at technical changes that will raise the bar for monitoring. Small things, like removing weak encryption algorithms. Bigger things, like making support for
secure connections mandatory in HTTP 2.0. These are of course general tools for improving security of the Internet and not merely reactions to current concerns. And in my opinion, perhaps the notion that the Internet is by default insecure needs to change. For example, today, security only gets switched on for certain services like banking. I ask: should we change that assumption? And indeed, with the ongoing developments in the web protocol stack and the attention on security, this might be possible. If there is a moment in our lives when we can have an effect on the security of the Internet, it is now. Let us use the moment wisely.

Obviously, technology alone cannot solve all problems. I would like to invite you at IGF and other organisations to work together with us to build a secure Internet.

Thank you.

Jari Arkko, Chairman of the IETF