WRC-15 Viewed from the Front Row

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Radio Regulations Board (RRB) members are customarily seated in the front row at the World Radiocommunication Conference (WRC), and I was seated in the very center of the front row, where tension in the room can be instantly sensed. For me personally, WRC-15 was very special and memorable for a number of reasons.

Everybody would probably agree that the agenda items generating the most heated discussion were the additional frequency allocation for IMT and the frequency allocation for unmanned aerial vehicles. Japan had emphasized its interest in the additional allocation for IMT. North and South America and Europe have identified 400 MHz of bandwidth in the 3 GHz band while the Asian Region only agreed to 200 MHz in the same band, with the remaining 200 MHz to be allocated domestically by Japan and Korea. Although this was a disappointing outcome for Japan, I still believe that Japan should pioneer and show the usefulness of wireless broadband to the world and endeavor to further prepare for expansion of the available spectrum at WRC-19. While the details of the frequency allocation for unmanned aerial vehicles will be redetermined at WRC-23, the identification of candidate frequencies was a noteworthy achievement coming at the end of a heated debate.

Is Vision of Allocating Common Global Frequencies a Chimera?

WRC-15 was the toughest conference that I have ever experienced. Even reaching agreement on a frequency allocation outside the 3 GHz band for IMT agreement proved impossible, and the Asian Region could not reach agreement beyond the 200 MHz bandwidth, half the allocation identified in Europe and the Americas. The countries of Southeast Asia placed high priority on using a significant amount of C-band spectrum for satellite communications. Yet in a private conversation, these same countries admitted that they would migrate over to high-speed mobile communications in the long run. The reality is that many of the developing countries—including those in Southeast Asia are transitioning slowly from plain mobile telephony to broadband mobile communication while sustaining their economies and meeting the demands of their citizens.

One observes a similar phenomenon in the advanced countries of Europe and the Americas, where there is little agreement outside the 3 GHz band. The frequency bands that might be used differ from country to country because the bandwidth has already been allocated to existing services. Consequently, the world frequency use chart ends up looking like a disjointed mosaic or patchwork. Is there some way of resolving this global patchwork of frequency usage? It would certainly be a monumental challenge. Indeed, some from countries leading in mobile technology are beginning to cast doubt on whether continuing to pour energy into reducing this patchwork of frequencies is really the right approach. Rather, they have started to believe that seeking bilateral agreements between major countries based on national allocation is a better approach. Especially considering the rapid progress in terminal technology in recent years, handling multiple frequencies is no longer the technical problem it once was. Although this concept may be out of step with basic ITU precepts and the principle of consensus, it does suggest that even the ITU is not immune from rapidly changing business models. While



Photo 1: Plenary Session of WTC-15





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Photo 3: Informal discussion during a break period



discussions based on the promise of common global frequencies and business that is aware of the speed of economic expansion have always coexisted, I wonder if we might be approaching the age when we have to choose one or the other.

Confusion Surrounding Unmanned Aerial Vehicles (UAVs)

The agenda item dealing with frequency allocation for UAVs is being considered on a totally different level from the allocation for IMT. National intentions regarding UAVs have become quite entangled—some countries are pursuing UAVs for civilian purposes, other wary countries are envisioning military applications, while still other countries are interested in the political implication of UAVs—and this diversity of objectives makes it extremely difficult to move forward. Listening to the discussion, seated in the front row, I felt a sense of helplessness at not being able to achieve anything regarding this issue at the WRC, but then, on the second to the last day, the majority of countries expressed their views and pushed through a draft resolution to describe multiple frequency candidates. A round of spontaneous applause erupted as soon as the decision was reached, and this has really stuck with me.

What Is Expected of the RRB?

While obscured by the two agenda items discussed above, the issues pertaining to RR (Radio Regulations), i.e., the considered opinions of the RRB, are often attended by heated debate. As a practical matter, the RRB is constantly forced to choose between RR that should be applied strictly and RR that should be taken as a practical solution in line with actual business practices. While some member states believe that RR should always be strictly applied, I think that a more lenient and practical approach can be beneficial.

Consider, for example, the problem we had with the LAOSAT-1 satellite when it was facing the deadline for being brought into use. The deadline was postponed once by a previous WRC, and a new request for further extension came to the RRB in May 1995. However, we were not prepared to accept yet another delay. Then in May, the Lao PDR presented an actual launch schedule in addition to the usual planning documentation. After further deliberation based on this additional information, it was agreed to accept the request from the Lao PDR and extend the deadline until the end of the year. Fortunately, while WRC-15 was in session, we learned that LAOSAT-1 was launched successfully. RRB is considered to be a custodian of the Radio Regulations, but it also exists to help genuine programs through extra-legal decisions. I believe that a middle-of-the-road approach-not overly strict but not excessively lenient-is the most important role for the RRB.

The RRB was assigned a good deal of homework to accomplish following WRC-15. Treatment of "force majeure" including launch failure is one of the most controversial tasks, and the creation of a Rule of Procedure for handling filing applications for the newly allocated 13 and 14 GHz bands is a very difficult task.

Having served as a spokesperson for the RRB at WRC-15, my term as chairperson of the RRB will come to an end at the end of 2015 although I will still serve as a member. I am deeply grateful to the many people who supported my efforts during my term, and I certainly wish that someone from Japan will be sitting in the front row at WRC-19.