

On Being Appointed New Chairman of ITU-R Study Group 6

Yukihiro Nishida

Senior Research Engineer
NHK Science & Technology Research Labs.
Chairman of ITU-R SG 6

I was appointed as Chairman of Study Group 6 (SG 6) at the ITU Radiocommunication Assembly held in October 2015. I would like to express my sincere appreciation for the unanimous support.

SG 6 was formed as a merger of SG 10 and SG 11 at RA in 2000 and further restructured at RA-07. I am the third Chairman of SG 6 and the first from the Asia-Pacific region. The appointment would be partly due to my experience as Vice-Chairman of SG 6 and Chairman of WP 6B since RA-07 but mainly due to Japan's pioneering work on broadcasting technologies such as the world's first direct satellite broadcasting, HDTV, emergency broadcasting, and the recent UHD TV.

In the ITU-R dealing with radiocommunication, SG 6 is tasked with studying the end-to-end chain of broadcasting including programme production, transmission and reception, baseband audio and video signals, and quality assessment. While SG 5 is responsible for terrestrial services, terrestrial broadcasting is within the purview of SG 6. This might be due to the consideration that ensuring the quality of broadcasting services is significant and closely related to one of the strategic goals of ITU-R, which is to ensure the necessary performance and quality in operating radiocommunication systems.

SG 6 will study not only terrestrial delivery systems but also requirements for delivering broadcast content through satellite broadcasting and other wireless or wired delivery means as well as content creation and programme assembly for all ways of delivery. Now that end users have access to broadcast content through various delivery means and on various end-user terminals, the challenge for SG 6 would be to study how high quality broadcast content could be produced effectively and efficiently and delivered to end users in such an environment.

The transition from analogue to digital television is ongoing around the world. There are six DTTB systems specified in the ITU-R Recommendations. These multiple systems have resulted from different requirements, and different regions and countries adopt different systems. In developing and standardizing a next generation terrestrial broadcasting system, we need to study various aspects: the need for a single worldwide system, large capacity transmission for UHD TV and beyond, the capability to



Center: the author
Left: BR Director, Mr. Rancy, Right: Counsellor, Mr. Hai

continuously introduce new technologies, and the diversification of the reception environment.

Research and development of new terrestrial television broadcasting systems is on the move. In order to introduce a new service adopting new technologies, it is essential to continue existing broadcasting services without interruption until viewers are prepared to receive the new service by installing new receivers. Simulcasting for a transition period is a solution, but it requires additional spectrum. It would be a pity if a lack of spectrum prevents the introduction of new broadcasting services. It is also important to consider the efficient use of spectrum.

At the first SG 6 meeting, held on February 5, 2016, the structure of SG 6 Working Parties and their Chairmen and Vice-Chairmen were approved. An outstanding issue from the previous study period on image formats for high dynamic range television was settled with the agreement of a draft new Recommendation ITU-R BT.[HDR-TV] for an adoption and approval procedure, which will enable the broadcasting industry worldwide to prepare for the launch of a new broadcasting service.

Broadcasting is mass media that provides audiences with high quality audiovisual content. SG 6 should continue to be the pioneer of international standardization for broadcasting services, and it should study new audiovisual content and applications as well as new delivery systems and networks. I would like to invite all members of ITU-R to get involved in the discussion and contribute to the work of SG 6.



Photo: The first SG 6 meeting on February 5, 2016