

= A Serial Introduction Part 4= Winners of ITU-AJ Encouragement Awards 2016

In May every year, The ITU Association of Japan (ITU-AJ) proudly presents ITU-AJ Encouragement Awards to people who have made outstanding contributions in the field of international standardization and have helped in the ongoing development of ICT.

These Awards are also an embodiment of our sincere desire to encourage further contributions from these individuals in the future.

If you happen to run into these winners at another meeting in the future, please say hello to them.

But first, as part of the introductory series of Award Winners, allow us to introduce some of those remarkable winners.

DiBEG Task Force for New ISDB-T Countries

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Fields of activity: Digital Terrestrial Television Broadcasting

ISDB-T digital terrestrial television broadcasting: support for global outreach and standard setting



ISDB-T, the terrestrial television broadcasting scheme developed by Japan, has been standardized as ITU-R Recommendation BT.1306 System C. As of the end of 2016, 19 countries including Japan and Brazil have committed to adopt this terrestrial digital television broadcasting (ISDB-T) scheme upon which this standard is based. In starting up terrestrial digital television broadcasting in these countries that have decided to adopt ISDB-T, it is critically important that the ISDB-T broadcasting system and operational guidelines are formulated in way that is attuned to the circumstances and conditions of the respective countries where the system will be adopted.

The DiBEG (Digital Broadcasting Experts Group), set up under the auspices of the ARIB (Association of the Radio Industries and Businesses) Promotion Strategy Committee, is charged with assisting Botswana, the Philippines, Sri Lanka, and the Maldives make the transition to ISDB-T broadcasting, while the Task Force for New ISDB-T Countries is responsible for expediting the cut-over to ISDB-T broadcast by Asian and African nations.

Digital terrestrial broadcasting has significant advantages—enhanced utilization of frequencies that supports more channels, support for HDTV services, and more—and countries around the world are now in the process of abandoning analog terrestrial services

for digital terrestrial TV broadcasting. To facilitate the transition to digital, we offer a ISDB-T broadcasting system that accommodates the local conditions of each country including the language of the country, analog television broadcasting standards, allocation of frequencies, and other local conditions.

The accommodating ISDB-T broadcasting system that can be adapted to the conditions in different countries is based on ITU-R recommendations and Brazil's ISDB-T broadcasting system (the ABNT standard). This is because Brazil's existing ISDB-T system maintains commonality with Japan's broadcasting system and is also capable to adopting new video and audio encoding systems. Regarding the data broadcasting coding system, a scheme based on Japan's ARIB standard which is nearing practical deployment has been proposed.

For receiver specification guidelines and an EWBS (Emergency Warning Broadcast System), reference to technical harmonization documents drafted by the ISDB-T International Forum has been proposed.

DiBEG remains committed to widespread adoption of ISDB-T and to provide technological assistance to respective countries in the years ahead.

Tomoaki Kanazawa

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Fields of activity: Global Business Development



Telephone Network Project in Hanoi City with Vietnam Posts and Telecommunications Group

I am honored to receive the prestigious ITU-AJ Encouragement Award, and would like to thank everyone involved.

My first international project, based on a business cooperation contract (BCC) between Vietnam Posts and Telecommunications and NTT Vietnam, sent me for a six-year term to Vietnam from 1997 to 2003 to work on the Telephone Network in Hanoi City. Today Vietnam is a thriving country and a popular tourist destination, but it wasn't that so long ago that Hanoi was still a city of unfulfilled future potential.

I was part of the first implementation team to arrive in Hanoi, and we found that there were still many unresolved issues not covered

by the contract. Just getting up and ready to launch the project—grasping the situation, setting out new operating procedures and processes, and so on—took far longer and took much more energy and effort than we could have imagined.

I can recall at the very beginning our Vietnamese partners saying “We can't give you information about the telecommunication facilities that you requested.” Obviously, this information was essential in order to formulate a capital investment plan, so the project ground to a halt until the information could be compiled. I still have combined bittersweet and good memories of that time.

We certainly did not agree about everything, but I am so thankful

we had the good fortune of a counterpart who was always honest and forthright: "Excellent proposal, but it goes against our established policy so we can't go along with it." This signaled that we had a tough hurdle to get over, but at the same time, we were really glad to get a candid, straightforward opinion.

The project ran for 15 years to completion, and having gone over with the initial project team, I still feel quite emotional about the experience. I keep in touch with my counterpart, and I know him well

enough to be invited over to his place when I visit Vietnam.

Vietnam has continued on the road to development, and as chance would have it, after an absence of 13 years, I have been called back to work on another Vietnam-related project. Receiving this award is most encouraging. I will do my best to accomplish my new mission, while cherishing the opportunity to work with people and make new international friends.

Kenji Sagayama

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Fields of activity: ISDB-T digital TV standard
promotion & migration



New Dawn in Botswana

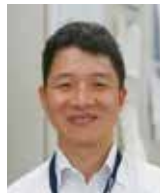
In the summer of 2014, I took a late night flight from Hong Kong via Johannesburg, South Africa, and arrived in Gaborone, the capital of Botswana a little after 7:00 in the morning. With a land area some 1.8 times the size of Japan, and a population just under 2 million, I was impressed by the expansive territory of Botswana. Diamonds are the country's most important source of revenue, and nearly 30% of gross national income is spent on education.

Alone among the SADC nations of South Africa, Botswana foregoes financial aid and strives for economic independence. Botswana is also unique in having chosen the Japanese ISDB-T standard, motivated by a desire to break away from the media and content domination of South Africa, whereas all the other SADC countries opted for the European DVB-T2 standard. The Japanese standard has a channel bandwidth of 6 MHz, so Botswana's receivers had to be upgraded to Europe's 8 MHz (PAL) to align with the rest of the continent. Unfortunately, modified receivers had not

been developed, even by NHK Science & Technical Research Laboratories, as late as 2012-13. From our perspective as a smaller firm, the prospects of Botswana adopting the ISDB-T standard looked rather uncertain. And even if they adopted the standard, the prospect of ramping up to mass produce 8 MHz receivers in just 2-3 years time might jeopardize our own profitability. But one thing is clear; you can't conduct onsite demonstrations and field trials to assess a standard without receivers. But then, just six months later, we were mass producing 8 MHz mobile phones (supporting One Seg TV) and 8 MHz-compliant set-top boxes (STB) for delivery to the Ministry of Internal Affairs and Communications (MIC), and ready to support the ISDB-T standard in Africa. With technical support from Access Corporation, we unveiled an STB featuring BML (datacasting) in 2015 tailored for the Botswana market. Botswana now plans to complete its transition to digital broadcasting later this year.

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Fields of activity: Television



Looking back on technical assistance for the introduction of ISDB-T in Uruguay

I have been back in Japan now for three years since completion of my work to promote and disseminate ISDB-T in Uruguay. The mission was to provide technical support to help Uruguay in converting over to ISDB-T, Japan's digital television system. This was soon after Japan had successfully switched over from analog to digital TV, and I was quite pleased to have been involved in a succession of these conversions. I arrived in Uruguay eager to follow up on this track record by helping that country navigate the changeover from analog to digital.

But when I got to Uruguay, I discovered that the law mandating the changeover had been pushed through by a small group of bureaucrats and broadcasters, it called for rapid conversion to digital within a very short timeframe, and did not address many key issues relating to channels, maintenance policies, and a host of other critical details. This left me wondering whether we would be able to get the project off the ground at all, let alone carry the digital changeover through to completion. Being in a different culture, not speaking Spanish, and not having another Japanese colleague with whom

I could confer, I was very apprehensive but nevertheless forged ahead in trying to resolve the mountain of obstacles that laid ahead. But as time went on, the language barrier seemed less formidable, we began to make really significant, steady progress in dealing with the most intractable issues. The channel plan, measurement techniques, and other basic requirements needed to implement digital broadcasting gradually fell into place, and we made a major leap toward in implementing digital broadcasting.

At first I imagined that my whole two-year mission in Uruguay was going to be one long nightmare dealing with one intractable problem after another, but such was not the case. Looking back on the experience, I have nothing but fond memories of my time in Uruguay. I am currently back at my previous job hard at work on next-generation SHV (8K) television technology. Japan's ISDB-T initiative is well on the way to becoming a world standard, and I eagerly anticipate the day I can go back to Uruguay as a true amigo to serve in a similar technical support capacity.

Junji Matsuoka

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Fields of activity: TV Program Production Engineering



ISDB-T standard promotional activities in Southern Africa

I am extremely honored to receive the ITU-AJ Encouragement Award.

For nearly a year beginning in July 2012, I served in the Republic of Angola as a technical cooperation expert for the Japan International Cooperation Agency (JICA). I was engaged in a wide range of activities intended to encourage adoption of the ISDB-T standard in South African countries. ISDB-T is a digital terrestrial television standard developed in Japan that has been widely adopted in Latin America and across Asia. At the time I was serving in Angola, the deadline of analog television switch-off was approaching, which was specified by ITU International Agreement (GE-06) as June 2015. Most South African countries (other than the Republic of South Africa) had not determined the standard for digital terrestrial television, so the Japanese Government and other concerned organizations sought to persuade these countries to adopt Japan's ISDB-T standard.

During my service, I was based at the Angolan national broadcasting station, and promoted the advantages of ISDB-T to various South African countries by providing technical guidance for digital broadcasting, conducting demonstrations of ISDB-T test

broadcasting, and presenting ISDB-T at international conferences. Due to these continuous efforts, the Republic of Botswana officially adopted ISDB-T as the first African country to do so in February 2013.

Extensive parts of Africa are still suffering from the lack of medical attention, food supply, water and electrical infrastructure which are essential for a sustainable life. When I first arrived in Africa, I questioned what role television could possibly have in such a low life standard. But by spending time with many local people, it became apparent that this question was unnecessary. Any place where people gather such as restaurants, barbershops, hospitals, and other public places, you will find a television set surrounded by a huge crowd of viewers, especially for soccer matches with fans rooting for their favorite teams. For these people, television offers great happiness and joy to their daily lives.

When broadcasting technology develops, it is critically important that the quality of programming also evolves. Since program production is my field of expertise, I am confident that the improvement of program production will continue to bolster and expand the television industry of Africa.

Shigehiko Yasumura

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Modest beginnings but persistence pays off

Based on an APT program approach, Fujitsu Limited began work on ICT projects in the medical field in the Lao People's Democratic Republic in 2009, in collaboration with JTEC. JTEC had worked on a ICT Master Plan in the medical sector the previous year. This was the first time we participated in this type of international collaboration, and we learned a great deal through on-the-job involvement.

One critical task was to recruit an effective project manager who could follow through with complete system implementation in an unfamiliar overseas environment. Recruiting capable managers for Japanese international cooperation projects is a major challenge, even when seeking to recruit outside Japan.

In 2012, we visited the Republic of the Union of Myanmar (Burma) as part of a mission arranged by JTEC. At workshops, we observed keen interest regarding advanced ICT technology, and received requests to provide human resource development support to train personnel and bring them up to international standards.

After a period of "No Action Talk Only" imposed by "NATO," we were finally able to secure permission to establish Fujitsu ICT Laboratory at the University of Information Technology (UIT). At the same time, we opened a Fujitsu Yangon Branch that will collaborate with the UIT to enhance practical ICT education

covering basic software development and system engineering. This last November, instructors held a system development workshop at the laboratory, and 20 students working in teams developed a hotel reservation system. They learned the importance of communication among team members to complete the task. Needless to say, this is an important lesson, and we hope these students will work with us in the future in Myanmar.

This relationship with UIT provided an opportunity to pursue an APT pilot project together with the KDDI Foundation to build an open-source software cloud platform and network for sharing computer resources and educational materials with the other computer-oriented universities in remote areas of Myanmar.

To ensure sustainability and maintenance of advanced technology, we are attempting to transfer technology to local engineers through on-the-job training in the pilot project. It may take a while for the technology to take hold and become well-established in society and the economy. We are committed to extend cooperation to ITU and APT member countries to move forward to achieve sustainable development goals.

(Note) JTEC: Japan Telecommunications Engineering and Consulting Service
APT: Asia-Pacific Telecommunity.