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The ITU World Information Society Award Honouring three laureates

/ The ITU World Information Society Award was created in 2006 to honour individuals or institutions that have made a significant contribution to promoting, building, or strengthening a people-centred, development-oriented and knowledge-based information society. Recipients are recognized for such achievements as creating key technical innovations, mobilizing public opinion or improving people's quality of life through the use of information and communication technologies (ICT). The Award is presented on the occasion of World Telecommunication and Information Society Day (17 May).

This year's Award was received by two outstanding individuals and an innovative ways, each laureate has achieved significant progress in spreading the benefits of ICT. As ITU Secretary-General Hamadoun I. Touré commented at the ceremony in Geneva, "this Award is a symbol of our commitment to connecting everyone — even in the most remote corners of the world."



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June 2007



Dr Margarita Cedeño de Fernández receiving the Award from Dr Touré for her outstanding personal contribution towards building an inclusive and equitable global information society

Community ICT in the Dominican Republic

Dr Margarita Cedeño de Fernández First Lady of the Dominican Republic

/ Dr Margarita Cedeño de Fernández is the wife of the President of the Dominican Republic, His Excellency Dr Leonel Fernández. She holds a Doctorate in Law from the Autonomous University of Santo Domingo (UASD) and a Master's degree in Economic Legislation from the Madre y Maestra Catholic University. As First Lady of her country, Dr Cedeño de Fernández has focused on families, particularly those at the lower end of the resource scale, as the fundamental unit of society

— and thus one of the best targets for development aid. She sees information and communication technologies (ICT) as having a major part to play in helping rural families to improve their lives.

"I feel honoured and humbled to receive this important recognition for the continued work that our government has been doing, in particular on behalf of the Office of the First Lady, in favour of universalizing the access, use and management of ICT as a key

⁴⁴ I feel honoured and humbled to receive this important recognition for the continued work that our government has been doing, in particular on behalf of the Office of the First Lady, in favour of universalizing the access, use and management of ICT as a key tool for the development of our nation. ²⁹

tool for the development of our nation," she said in her speech upon receiving the Award. "Our commitment has been to promote a development that is human and inclusive for Dominican families, which we implement by way of social and educational strategies that allow for the empowerment of each family member so that they may assume the responsibility for their own future well-being. These strategies are strengthened through the effective use

of ICT as an efficient and expeditious tool, which permits us to develop by transforming the lives of our citizens," Dr Cedeño de Fernández said.

Reaching the poor

The Dominican Republic is a small Caribbean country that shares the island of Hispaniola with the Republic of Haiti. "Of a population of 8.6 million inhabitants, more than 3 million live in conditions of extreme

Community ICT in the Dominican Republic



Centres throughout the Dominican Republic.

poverty, without basic necessities, without access to technology, and excluded from the development process and the potential benefits that globalization could offer," explained Dr Cedeño de Fernández in a speech

in Geneva at the launch of the Digital Solidarity Fund in 2005.

At that event, she underlined that the advantages of the information society represent an important revolution, from which Dominicans - like people all over the world — stand to benefit. "Facilitating access to the information society for each community, home, and citizen; and making a transition from the pre-industrial era to the digital era, must be our overall national and international objectives," she said. She also conveyed her and President Fernández's strong support and commitment to the cause of the Fund, and stressed that it is necessary to "connect economic policies with an inclusive social programme, which would guar⁶⁶ Our commitment has been to promote a development that is human and inclusive for Dominican families, which we implement by way of social and educational strategies

that allow for the empowerment of each family member so that they may assume the responsibility for their own future well-being. These strategies are strengthened through the effective use of ICT as an efficient and expeditious tool, which permits us to develop by transforming the lives of our citizens. **

antee the underprivileged access to benefits produced by ICT".

The First Lady explained that the Dominican Republic's telecommunication sector is of fundamental importance for the

national economy. "However, we have a low level of those with access to Internet services ... all of whom are concentrated in the large cities," she said. "Those that reside in rural areas and the marginalized urban outskirts remain detached from the benefits and opportunities offered by ICT," she added.

Part of the Dominican Republic's answer to this challenge is an ambitious plan to close the digital divide by improving Internet connectivity, digital literacy and human resources in ICT. President Fernández has appointed the Office of the First Lady to implement projects aimed at achieving these goals. The task is to make technology serve the people, especially those who live in the most impoverished areas.









Source of photos: Office of the First Lady, Dominican Republic

Community Technology Centres

One of the projects is to install 135 *Community Technology Centres* (CTC) throughout the Dominican Republic. This will enable very poor communities to become a part of the development process for the social, cultural and economic advancement of the country and help it to achieve the United Nations Millennium Development Goals.

"We have focused on establishing *Community Technology Centres* in the pockets of poverty in the Dominican Republic,

where we have put ICT at the hands of the most disadvantaged. Currently we are working in the poorest municipalities and communities in our country," explained Dr Cedeño de Fernández. The goal, she said, is "to build a Community Technology Centre in each and every municipality and village".

She invited the audience to watch a video documen-

tary highlighting the significant impact that the CTC set up in the community of Pedro Sanchez has had on the community's youngest inhabitants. "Before the creation of the centre, it was very difficult to gain access to ICT", one mother in the video explained, going on to observe that "poor people do not have the fundamental resources to take a computer course".

Now, however, a Community Technology Centre provides opportunities for every member of the family. The video showed a girl teaching her grandmother how to use a computer, while there are also facilities for children of all ages. "After you have taken a course here, you feel good because you are more open-minded and you know what you want to do in the future!" one young girl said.

"The Community Technology Centre is a very inclusive place. People that work the land, or sell candy or handicrafts have the opportunity to use the centre to help them with their businesses," commented the First Lady in the video, adding that courses are also offered to people with disabilities.

Each centre throughout the Dominican

** The Community Technology Centre is a very inclusive place. People that work the land, or sell candy or handicrafts have the opportunity to use the centre to help them with their businesses. ** Republic will provide access to telephone, fax and Internet services. They will offer training in such areas as database creation and information processing, with the focus on increasing the skills of local people and their ability to use ICT effectively. It is planned to use CTC for programmes that improve gender equality by giving women and girls better ac-

cess to ICT and new job skills. The centres are also equipped with community radio stations, which are complementary to the educational programmes.

"In addition," says Dr Cedeño de Fernández, "our aim is that these *Community Technology Centres* become places where citizens can conduct banking transactions, transmit documents, access e-government services and virtual libraries, as well as create small businesses that benefit the local community and thrive by having access to modern ICT". The CTC will be equipped with conference rooms where workshops and educational programmes can be held.

Community ICT in the Dominican Republic



And each centre will be managed by a committee of local people. The vision of Dr Cedeño de Fernández is that the facilities will become the starting point for progress in every town where they are installed.

In the video, a number of children also visit the First Lady at the Presidential Palace. She tells them it is they who will create the society that every Dominican dreams about. Asked about the *Community Technology Centres*, she says

that her strongest wish "is that children like you join the world of computers and technology, and the information and knowledge society. That each one of you, together with your families, transmits the advantages of using ICT as a tool for development".

She ends the video by saying that Dominican people are full of vitality, intelligence, and hopes for achieving a better life. "I really would like to see the *Community Technology Centres* become the highway that leads them to development, progress and well-being, so they can help us build a just society — more equal, but most of all, more inclusive."

Global and local

As well as the benefits of ICT, Dr Cedeño de Fernández is also aware of the challenges. Particularly in developing countries such as the Dominican Republic, there is a ten-

•• Our aim is that these Community Technology Centres become places where citizens can conduct banking transactions, transmit documents, access e-government services and virtual libraries, as well as create small businesses that benefit the local community and thrive by having access to modern ICT. ** dency for ICT to be confined to comparatively wealthy populations living in the cities. When this causes certain groups to leap ahead economically, it "contributes precisely to the increase in the digital and social divides".

In November 2005, she was the head of the Dominican Delegation at the second phase of the World Summit on the Information Society (WSIS), held in Tunis. At a round-table discussion with other high-level participants, she emphasized that new technologies must go beyond the cities to reach the rural poor. "In order

to promote ICT as the engine of human and sustainable development, particularly through the achievement of the UN Millennium Development Goals, we have to localize or decentralize the Goals to the rural and local levels, where extreme poverty plagues today's societies," said Dr Cedeño de Fernández.

And it is through localized projects, such as the *Community Technology Centres*, that the Dominican Republic's First Lady plans to overcome the digital divide.





Mitchell Baker, Chief Executive Officer of Mozilla Corporation, receiving the Award from Dr Touré on behalf of the company for its outstanding contribution to the development of world-class Internet technologies and applications

Opening the Internet

Mozilla Corporation, represented by Mitchell Baker, Chief Executive Officer

✓ Upon accepting the 2007 ITU World Information Society Award on behalf of Mozilla Corporation, Mitchell Baker, Chief Executive Officer of the company, described Mozilla as "a global community of people who believe that openness, innovation and opportunity are key to the continued health of the Internet". Mozilla creates infrastructure through which groups of people organize themselves to improve the Internet. And it provides effective tools for using the web, in the form of open source software.

Ms Baker described the goal of the Mozilla project as follows:

"Imagine an Internet that is trustworthy because security experts from around the globe contribute their expertise to minimize risk for users.

Imagine an Internet that is optimized for multiple languages and local communities; an Internet where "internationalization" is more than translating menu items on software; an Internet where local communities can create a local experience.

Imagine an Internet where you, your government and your citizens know that the software you use does exactly what it says it does, and nothing more.

Imagine an Internet where thousands of programmers are looking out for your best interests.

Imagine an Internet where you and your neighbours help build the world you want.

Imagine an Internet that generates not only economic value, but also civic and social value."

The Mozilla mission, Ms Baker said, is to build an Internet incorporating all of these qualities. "We do this by building software, and by building communities of people who share this vision," she added. This vision, she said, is made real by building the software that people use, most notably Mozilla Firefox, and by empowering groups of people to participate more fully in online life. "We enable people to build software, to make that software fit local circumstances, to vet the quality of our software, and to modify and improve that software," Ms Baker explained.

The laureates

Opening the Internet

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...an Internet that generates not only economic value, but also civic and social value.

You are imagining the Mozilla project.

Open source software

The important role of software in helping to close the digital divide was recognized by the World Summit on the Information Society (WSIS). The *Declaration of Principles* issued at the Geneva phase of WSIS in 2003 states that "affordable access to software should be considered as an important component of a truly inclusive Information Society." The Tunis Commitment resulting from the second phase of WSIS in November 2005 reiterates "the need to encourage and foster... free and open source software in ways that reflect the possibilities of different software models, notably for education, science and digital inclusion programmes."

Open source software can be defined as programs that can be shared without restriction or the need for additional licences, along with source code that is easily available to allow users to modify it or correct faults. A further step is to make such software widely available. Mozilla Corporation is at the forefront of developing such open source software for surfing and using the Internet.

The story of Mozilla

The story started in 1998, when Netscape Communications, of the United States, announced that it would make the source code of its web browser *Netscape Communicator* freely available. This effort was known as the open source "Mozilla" project. The name was adopted by the Mozilla Foundation when it was launched in 2003 to carry on the work of providing open source programs after Netscape's parent company, America Online (AOL), scaled back its involvement.

In 2005, Mozilla Corporation was created as a wholly-owned subsidiary of the Foundation to develop, market and distribute Mozilla products. Although it is a commercial organization, all profits are invested back into project development. In other words, the company serves the goal of its parent to improve the Internet experience for people everywhere. This was underlined by Mitchell Baker upon the creation of the company. "The Mozilla Corporation is not a typical commercial entity. Rather, it is dedicated to the public benefit goal at the heart of the Mozilla project, which is to keep the Internet open and available to everyone," she said.





The web browser known as Mozilla Firefox is the most famous product of Mozilla Corporation



From a fox to a creature of the sky: Thunderbird is the name of Mozilla's e-mail application that is also an open source program which can run on a variety of platforms

The Mozilla menagerie

Originally a mascot of Netscape, the red dinosaur named "Mozilla" features in the logo of the Mozilla Foundation. Nowadays, though, perhaps the fox is the animal most frequently associated with the Foundation and with Mozilla Corporation. This comes from the famous product *Mozilla Firefox*, an open source web browser that is cross-

platform; that is, it provides support for various versions of the Microsoft Windows, Mac OS X, and Linux computer operating systems.

The latest major version of Firefox (2.0) was released on 24 October 2006. According to Ms Baker, Firefox has

between 75 million and 100 million users worldwide, and the number is rising. Data from US firm NetApplications indicates that, by April 2007, Firefox's market share among all web browsers was 15.42 per cent globally, up from 10.68 per cent a year earlier.

From a fox to a creature of the sky: *Thunderbird* is the name of Mozilla's e-mail application that is also an open source program which can run on a variety of platforms. In addition, it serves as a newsgroup and news feed client, with extra features available as extensions. The latest version of the program, Thunderbird 2, was released in April 2007.

The last release of the *Mozilla Application Suite* for Internet users came in 2006, but it has been carried forward by a group of open-source volunteers under the name of yet another animal: *SeaMonkey*.

This is an all-in-one Internet application suite containing a web browser, an e-mail and newsgroups client, an HTML editor, web development tools, and an Internet relay chat client.

International community

Mozilla Corporation is not, by itself, the creator of these programs. Rather, it is the

We are an open source project, which means our work product is available to all to use, free of charge. ³³ integrator and coordinator of work by hundreds of code contributors worldwide, and thousands of testers, designers, writers, and others. The corporation also partners with companies and organizations that share its vision, including world leaders in

the field such as IBM, Sun Microsystems and Red Hat.

Because of the numbers involved in creating and checking the software — and their continuous vigilance — it can have a better chance of achieving stability and resistance to attacks. In addition, the spread of the development community means that the software can become truly international: Mozilla says that more than 35 languages are supported by Firefox and Thunderbird.

The software is also free. "We are an open source project, which means our work product is available to all to use, free of charge," said Ms Baker. The much lower costs of open source software, together with the creation of Internet access tools in local languages, can help significantly in closing the digital divide.

Television pioneer and visionary

Professor Mark I. Krivocheev Chief Scientist at the Radio Research and Development Institute (NIIR), Moscow, Russian Federation

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✓ The life and career of Professor Mark I. Krivocheev has closely followed that of television itself. Born in the Union of Soviet Socialist Republics (USSR) in 1922, for more than half a century he has contributed his expertise to the development of technical standards for television — a prime source of information and entertainment for millions of people today.

Upon receiving the Award, Professor Krivocheev said: "I am deeply grateful for the honour that has been bestowed on

me. However, my immediate and heartfelt reaction is that I absolutely have to share this recognition with the dear colleagues and scholars that I have been privileged to work with, in Russia and in many other countries, over all these years. I am deeply, cordially grateful to them all."

On the home front

Mark Krivocheev graduated from the Moscow Telecommunications Institute in 1946, where he designed a scanning unit that allowed the new 625line television images to be displayed for the first time. He went on to develop and operate 625-line equipment at Moscow Television Centre. And on 3 September 1948, he pressed the switch to start the world's first 625-line transmissions.

The standard of 625 lines per frame was later approved by several countries in Eastern Europe, and subsequently implemented in the Western European standard. The concept was maintained in the developments

> that ensued for colour television and digital systems.

1951 Professor In Krivocheev was responsible for determining his country's first frequency plans for television stations. This was in the days before computers, and when transmitters and antennas operated on just one frequency and were difficult to modify once in service. Mistakes would have been costly, but he succeeded through his methodical approach.



Professor Krivocheev receiving the Award from Dr Touré for his lifetime achievements in the technical development of television services and systems

Television pioneer and visionary



Television complexes designed by Professor Krivocheev in the early 1960s for the first Molnya satellite system made it possible to measure and monitor international satellite television links for the first time. During this period, he also led work under an agreement with France on cooperation in satellite communications. This allowed equipment to be aligned for the satellite link between Moscow and Paris, leading to the first colour television

transmissions between the two nations.

In the Russian Federation he remains responsible for much of the technical basis of policy-making in broadcasting.

On the international scene

Mark Krivocheev has also been very active internationally. He is well known for his work in ITU's International Radio Consultative Committee (CCIR), which became the Radiocommunication Sector (ITU–R) in 1993. He has participated in television studies within ITU since 1948, serving as Vice-Chairman of Study Group 11 (Television) from 1970 and soon as its acting Chairman. He became the group's Chairman in 1974 and retained that position until the group merged with ITU–R Study Group 10 in 2000. The new group was named Study Group 6 (Broadcasting services) and Professor Krivocheev is its Honorary Chairman.

Under Professor Krivocheev's chairmanship, Study Group 11 produced more than 150 Recommendations covering all ele-

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ments of television, from the studio through to the quality of service for viewers. These became worldwide standards that still serve as the basis for technical policy in digital television broadcasting and related information services, and an essential foundation for the global information society. "The thing that fills me with the greatest joy is to view this Award as an acknowledgement of our long-standing wish and, indeed, lifelong objective: that

the results of the considerable work that has been done on the standardization of digital television should serve as an impulse for the creation and development of the global information society," the professor said.

A digital revolution

Work on creating global standards for digital television began in the early 1970s. "At the outset, there was a need to find ways of making it possible to achieve worldwide coordination and consolidate the efforts of the participants to avoid the wild proliferation of standards that had made the introduction of colour television needlessly complicated and expensive," Professor Krivocheev explained.

He is recognized internationally as the instigator of the global approach to today's television systems and services — an approach which seeks to harmonize diverse interests at an early stage so that technical progress is not hampered. This principle was also adopted in the development of high-

The laureates

Television pioneer and visionary





definition television (HDTV) standards. "This approach was fundamentally new, in that it took into account the need to harmonize and coordinate the technological characteristics of the main portions of the television transmission chain with the corresponding frequency management process," the professor said.

In July 1972, the first documents for digital television and HDTV (proposed by Japan) were developed at a meeting of Study Group 11. The first study programme on the digital compression of television signals was also adopted. Professor Krivocheev recalled that this was an important milestone in the history of digital television, because it marked the start of international coordination of work on television signal coding. "It has also played a decisive role in the creation of digital broadcasting systems, cable television, as well as in Internet protocol television (IPTV), and continues to be fundamental in the development of digital television," he added.

One of the most famous achievements of Study Group 11 under the chairmanship of Professor Krivocheev was the creation of a single, basic Recommendation on signal coding for digital television studios. Known as Recommendation 601, for a quarter of a century, it "has been enabling us to gradually displace mutually incompatible analogue colour television systems: NTSC, PAL and SECAM," the professor explained. The Recommendation's proposal for a worldwide standard for digital television earned ITU a Technology and Engineering "Emmy" award in 1983 from the National Academy of Television Arts and Sciences, of the United States.

The main obstacle to further progress now became the bandwidth available for digital television signals. Professor Krivocheev suggested that digital television and HDTV could be broadcast using existing channels (with significant signal compression), thanks to more efficient modulation techniques. He proposed new designs for the transmission of digital television signals via the 6, 7 and 8 MHz terrestrial television broadcasting channels (the "6-7-8" concept). "At the time, this looked like science fiction, and few believed it could be done. But the results were not long in coming. Studies worldwide were coordinated and became clearly focused," he recalled.

This marked, in 1992, the start of preparatory work for the ITU Regional Radiocommunication Conference held in Geneva in 2004 (RRC-04) and 2006 (RRC-06). The conference was "an essential step in the transition from analogue to digital broadcasting", the professor said. Its *Final Acts* include an Analogue Plan, covering this transitional period up to 2015, as well as a Digital Plan for new services. The *RRC-06 Final Acts*, signed in June 2006, bind 120 ITU Member States to switch to terrestrial digital broadcasting by 2015 (except for some VHF services in Africa, which will switch to digital by 2020).

Broadcasting and the information society

Many technologies and systems have been developed on the basis of ITU–R Recommendations, including digital television and sound broadcasting, satellite and mobile communications, cable television and multimedia. However, Professor Krivocheev

Geneva, 21 July 1972



In July 1972, the first documents for digital television and HDTV were developed at a meeting of CCIR Study Group 11.

In the photo are (left to right): Jack W. Herbstreit the then Director of CCIR, Mark Krivocheev and Ronald Froom



Television pioneer and visionary

Many notable new programmes and standards were prepared under the leadership of Professor Krivocheev, including:

- First draft of a new CCIR Study Programme on "Bitrate reduction in digital coding of television signals" Doc. 11/198, (1972).
- CCIR: Recommendation BT.601 "Studio encoding parameters of digital television" (1982).
- First draft of a new Question on "Interactive television broadcasting systems" Doc. 11/216 (1994).
- First draft of Recommendation ITU–R BT.798 "Digital TV broadcasting in the VHF/UHF bands", based on usage of existing analogue channels 6, 7, 8 MHz (1991).
- First draft of Recommendation ITU–R BT.709 on HDTV standards was adopted by the seventeenth CCIR Plenary Assembly (Düsseldorf, 1990). In 1999, Study Group 11 produced a new digital version of Recommendation (ITU–R BT.709), which became the single global standard for HDTV systems.
- CCIR (ITU-R) Recommendations 500 and 710 on "Method for the subjective assessment of the quality of television pictures and subjective assessment methods for image quality in high-definition television" (1990).

** The industry has been able to take the standards developed for digital television and move towards new frontiers in terms of the information society. >>

pointed out that "these systems remain largely separate and unharmonized, with the key role of interactivity having not been adequately recognized". He said that efforts should be consolidated to achieve "a single, universal platform for information and communication technologies (ICT) that can serve to integrate the development strategies for the global information society".

An important element of this universal platform could be "ubiquitous, digital multifunctional interactive broadcasting, encompassing a broad range of services and technical systems designed to provide users with information services and other multimedia applications," suggested Professor Krivocheev. The creation of such a platform was anticipated in the early 1970s, and first discussed at the international level in 1979–1980 at a commission of the United Nations Scientific, Educational and Cultural Organization (UNESCO), he said. These proposals were later examined by the joint Technical Committee of the World Broadcasting Unions, in Tunis in 1996, as well as during preparations for the World Summit on the Information Society (WSIS) in Geneva, 2003, and Tunis, 2005. Professor Krivocheev was the first to propose that interactive broadcasting be standardized internationally, at a meeting in Auckland, New Zealand, in 1993.

And on the eve of ITU TELECOM Interactive 97, he wrote that "it is now crystal clear that the formulation of a strategy for further progress in telecommunications is inconceivable without a comprehensive and fundamental solution to the problems of interactivity."

Professor Krivocheev said that the strategy for creating and developing information and communication systems "should be revolutionized on the basis of an enhanced definition of the global information society". He added that such a definition could be based on the progress that has been achieved in digital broadcasting and the ecological protection of consumers, since the global information society will be one that provides "the opportunity to send and receive information from any point on Earth and at any time (whether stationary or on the move) and in any language." It will also be a society which offers a plethora of consumer devices, mostly remote controlled, providing information and communication services through automated interaction.

New frontiers

Building on the achievements made in signal compression and processing for digital interactive television broadcasting and multimedia, as well as on recent successes in microelectronics and imaging systems, "the industry has been able to take the standards developed for digital television and move towards new frontiers in terms of the information society," the professor said. Thus, the concept of digital opportunities for all can now be put into effect. However, "much work remains to be done," he added. In aiming to create an information society accessible to all, he said, "never before has ITU faced such an ambitious and responsible task". He believes that a considerable part of this challenge can be tackled within the framework of the 2008-2011 Plan adopted at ITU's 2006 Plenipotentiary Conference in Antalya.

Television pioneer and visionary

⁶⁶ The most memorable event I can call to mind from my past was when I observed, on a screen smaller in size than a matchbox, an image consisting of 30 lines and produced by means of a Nipkow disk receiver that a group of radio amateurs, with my participation, had assembled in Poltava in 1932–1933. That was the start of my lifelong fascination with television. ³³

The professor said that the work of ITU Secretary-General Hamadoun I. Touré and his top management team, in their first halfyear in office, "confirms the effectiveness of their new approach to consolidating and harmonizing the efforts of ITU to realize its leadership role in the development of the global information society". He added that Dr Touré, as Director of the ITU Telecommunication Development Bureau (BDT), "already showed great foresight and creativity in promoting advanced digital technologies, and continues now to make high demands for the development of international sound and television broadcasting standards".

A lofty campaign

Describing worldwide efforts to advance radiocommunications as "a lofty campaign", Mark Krivocheev said that he was "profoundly grateful for the considerable assistance and support provided by Valery Timofeev, who, before becoming Director of ITU's Radiocommunication Bureau (BR), was for many years the Deputy to the Russian Minister of Communications. He "provided exceptionally competent and effective assistance in connection with ITU activities", the professor said.

He also expressed his deep gratitude to Leonid Reiman, Minister for Information Technologies and Communications of the Russian Federation, and Yury Grin, former Chief of the Department for International Cooperation within the Ministry (now Deputy Director of BDT), for their unfailing support and assistance and, in particular for "their great creative contribution to the international emergence and development of the global information society". In addition, Professor Krivocheev acknowledged "the great contribution to overcoming the digital divide made by the Chairman of ITU–R Study Group 6 Alfredo Magenta (Italy), by the study group's Vice-Chairman Giuliano Rossi (Vatican), who actively participated in the development of Study Group 6 proposals on the subject, by Nabil Kisrawi, an expert from the Syrian Arab Republic of wide renown in ITU, and by Petko Kantchev (Bulgaria), who worked in this area within the ITU Telecommunication Development Sector (ITU–D) for many years".

A central role

Approaching his 85th birthday on 30 July this year, Professor Krivocheev, looked back to when the concept of television had first enchanted him as a boy. "The most memorable event I can call to mind from my past was when I observed, on a screen smaller in size than a matchbox, an image consisting of 30 lines and produced by means of a Nipkow disk receiver that a group of radio amateurs, with my participation, had assembled in Poltava in 1932–1933. That was the start of my lifelong fascination with television," he said at the Award ceremony.

Without Professor Krivocheev's contribution, the confusion of differing technical standards, between regions and between various types of equipment, would have taken far longer to disperse. His work has been honoured by many national and international bodies, and the millions who enjoy watching television also owe him their thanks.

Mark Krivocheev has invented, alone and with others, dozens of devices that have been patented in the field of television. He has also written or co-authored hundreds of scientific papers and books, mainly on topics concerning the measurement of technical parameters, digital television and perspectives on broadcasting. One of his most recent works was published (in Russian) by NIIR in 2006. Entitled "The international standardization of digital television broadcasting", it recounts the procedures that created the foundation for modern services, drawing on the unique archive of materials the professor has collected since the early days of research in this field.



The text of the book may be viewed at http://tvmuseum-1.hosting.parking.ru/catalog. asp?ob_no=7013