

COMPETITIVENESS AND INNOVATION FRAMEWORK PROGRAMME

ICT Policy Support Programme (ICT PSP)



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<i>Document authors / organization:</i>	Tom Owens, Brunel
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1. Introduction

For the purposes of this document Dissemination' is defined as a planned process of providing information on the quality, relevance and effectiveness of the results of programmes and initiatives to key actors. It occurs as and when the results of programmes and initiatives become available.

The dissemination activities of DTV4All seek to target all groups with a stake in the outputs of the project. These groups have been identified as the users of television access services, the consumer electronics manufacturers of television set top boxes and integrated digital televisions, the broadcasters, the creators of access service content, the relevant regulators, politicians and the European Commission, academia, and the general public.

The general public have a stake in the project as taxpayers and as their hearing and sight deteriorates with age as potential users of the access services DTV4All is promoting. For the most part the general public want to know about the project generally and are not seeking highly targeted information. Consequently, for the general public a project web site has been set up, see: <http://www.psp-DTV4All.org/> . A flyer on DTV4All has been produced which is available from the project web site. All of the deliverables of DTV4All are public and are made available for download from the project web site when they are submitted to the European Commission. Currently, deliverables D1.1, D2.1, D2.2, D3.1, D3.2, and D3.3 are available.

Although academics working in fields related to access service provision need more specific and detailed information than the general public they are easily addressed through relevant conferences, seminars and workshops^{1,2}.

For those groups with a more pressing interest in the outputs of DTV4All more specific measures need to be put in place. This document describes the processes put in place by DTV4All for providing information on the quality, relevance and effectiveness of its results to broadcasters, the creators of access service content, consumer electronics manufacturers, users, relevant regulatory bodies, politicians and the European Commission. These processes take effect as and when the results of the project become available.

Section 2 describes the main dissemination tasks of DTV4All and section 3 the role of the project deliverables in dissemination. Section 4 explains how the results of the project will be

¹ Peter Looms, Access Services & Harmonisation, 2nd International Conference "Television For All", 7-9th November, 2007 Polytechnic Institute of Leiria Portugal

² S Braun and P Orero, "Audiodescription with Audiosubtitling: an emergent modality of audiovisual localisation", ESIST Conf., Berlin October 2008

disseminated to its target user groups through their user associations. Section 5 outlines the events that will be laid on by DTV4All for the creators of access service content. Section 6 specifies how DTV4All will interact with the participants in the digital television access service value chain. Section 7 explains how DTV4All informs politicians and the European Commission of its outputs. Crucially, section 7 also describes how the project will target the relevant regulators. Section 8 outlines the future plans of DTV4All for dissemination activities.

2. The main dissemination tasks of the project

Dissemination in DTV4All involves three main elements:

2.1 Establishing Memorandum of Understanding for dissemination

The European Broadcasting Union (EBU) is the largest association of national broadcasters in the world. It promotes cooperation between broadcasters and facilitates the exchange of audiovisual content. The EBU works to ensure that the crucial role of public service broadcasters is recognised and taken into consideration by decision-makers.

A Memorandum of Understanding (MoU) forms the basis of the project's collaboration with the EBU, and through the EBU potentially other bodies covering standardisation, interoperability and other dissemination measures. The MoU details the project deliverables that will be used by the EBU in their own ongoing dealings with European and international standardisation bodies.

The EBU has undertaken to encourage the practical aim and approach of the DTV4All consortium to helping broadcasters provide access services in a sustainable way. The DTV4All project fits well with related work carried out in the EBU³.

An important part of the work of the EBU is sharing of experiences and best practices amongst its Members. The EBU welcomes results from the project being made available for sharing with the wider EBU Membership and the broadcast industry at large. The EBU has offered to assist in this process by providing:

- Publication space in the EBU Technical Review⁴ for article(s) on the project's results
- Presentation(s) at relevant EBU seminars, especially the yearly EBU Forecast⁵
- Presentation(s) to and discussion with the EBU Subtitling/Txt group
- Organisation and hosting of one or more seminar(s)/workshop(s) dedicated to Access Services (to be organised together with the Project Consortium)

The EBU's technical work is predominantly carried out in Project Groups⁶. These Groups are created when EBU Members express a minimum level of interest in certain topics. In the recent past two Groups on Access Services have been active:

³ EBU Report on Access Services, 2004, available from: www.ebu.ch/CMSimages/en/tec_text_i44-2004_tcm6-14894.pdf

⁴ EBU Technical Review, available at: www.ebu.ch/en/technical/trev/trev_home.html

⁵ EBU Forecast, see: www.ebu.ch/en/technical/seminars/bmc_forecast_2007.php

1. P/AS “Access Services” studied the deployment of Access Service in Digital Television environments and provided a report with information on the available services, technology and recommendations for broadcasters
2. P/MAS “Monitoring of Access Services” is a current project

If the results of DTV4All indicate that detailed technical work that needs to be carried out, the EBU's Technical Committee will consider starting a technical Project Group on that topic.

In the technical area the EBU publishes recommendations for it's Members/the industry at large to improve interoperability of equipment and working practices, such as for example the EBU Recommendation on Subtitling⁷. The EBU will consider recommendations coming from the DTV4All consortium for adoption as EBU recommendations, following the normal EBU evaluation procedures.

Interoperability is helped greatly by having open standards. The EBU is very committed to and active in the area of standardisation, typically by gathering user requirements from its Members and bringing them to the relevant standards bodies (Digital Video Broadcasting (DVB), European Telecommunications Standards Institute (ETSI), Society of Motion Picture and Television Engineers (SMPTE), etc.). Where additional standardisation proposals are made by the DTV4All consortium, the EBU will strive to support those initiatives.

Through EBU, with their more than 100 members worldwide, practical experiences and new service concepts can be shared, spreading 'best of breed' solutions. Continuation of the taken into operation additional access services at a national level can be encouraged. Close links to the EBU have been established by various partners in the project. DR, RAI, and RBB are active EBU members and IRT is heavily involved in the joint technical work of the EBU. The EBU participated in the DTV4All proposal preparation process and explicitly supports the project through the Memorandum of Understanding with the project. The project partners will contribute relevant results to the EBU.

2.2 Consolidated report on mature and emerging access services

DTV4All project Task 4.2 involves reviewing the contents of deliverables of other tasks to ensure that they are in a form suitable for wider dissemination and collating those parts of the deliverables suitable for wider dissemination. The main deliverables of this task (Deliverables

⁶ EBU Project Groups: www.ebu.ch/en/technical/projects/current/index.php

⁷ EBU Recommendation on Subtitling for Digital Television Broadcasting, R110: www.ebu.ch/CMSimages/en/tec_text_r110-2004_tcm6-10501.pdf

D4.4, D4.5) are a report and a presentation containing descriptions of the mature access services that are piloted during the course of the project, guidelines for their implementation throughout Europe, and recommendations regarding emerging access services for which there is industry-wide support. These recommendations will address:

- **Devices:** Recommendations will be made for device specifications to be adopted Europe wide based on existing DVB and DIGITALEUROPE (the European Information & Communications Technology Industry Association) draft specifications for digital television receivers (and recorders) and inputs from European territories already at an advanced stage of device and service standardisation using DVB-SI (Service Information), DVB-GBS (Generic Data Broadcasting & Service Information Protocols) and related standards.
- **Content:** Guidelines will be provided for the provision of subtitling, audio description and signing for various content categories on digital television
- **Services:** Guidelines will be provided for the setting up and running of access services for broadcasters and platform operators. These will include service models; business models; a listing of the appropriate standards for commissioning and producing content; business-to-business and business-to-consumer standards and formats for exchanging content and services; training of those involved in developing and producing access services for digital television; evaluation guidelines for services
- **Roadmaps:** Objectives and timetables will be provided on the basis of which objectives and timetables for subtitling, audio description and signing services for digital television platforms can be agreed at national and regional level, taking into consideration the circumstances of the digital television value chains in each territory

The EBU and DIGITALEUROPE will consider how the report can be used in ongoing standardisation and interoperability work in Europe.

2.3 Dissemination activities

As regards the scalability of the results of the DTV4All project, dissemination measures are critical. Here the aim is to disseminate the report and presentation from task 4.2 (Deliverables D4.4, D4.5) in the form of targeted seminars or courses delivered by project partners for a wide range of stakeholders including broadcasters, production companies, platform operators and regulators, building on the experience and dissemination infrastructure of the service content forums.

A wide range of constituents including universities can be addressed at MEDIA FOR ALL 3 held in Antwerp, Belgium, and supported by the EBU, DIGITALEUROPE, universities and digital cable and satellite operators. DTV4All project partner Red Bee is a benefactor of MEDIA FOR ALL 3 and project partner UAB is represented on the organising committee.

DTV4All participation at IBC (the leading international forum for the electronic media industry) will ensure a wide cross section of the industrial players in the access service value chain will be addressed.

The International Funkausstellung (IFA), held every year in Berlin, is one of the world's largest consumer electronics trade fairs. It is a "showcase for innovation and the technology of tomorrow". The trade fair is used as a platform by RBB and ARD in general to inform audiences about and promote programmes and services. New and emerging access services will be showcased as part of RBB's presence at the fair.

IRT will contribute relevant results to the EBU Working Group P/AS "Access Services" which studies the deployment of Access Service in Digital Television environments. IRT will publish DTV4All results in pertinent trade magazines such as FKT (Fernsehen- und Kinotechnik) and relevant symposia/colloquia. These dissemination activities are a prerequisite for the exploitation of DTV4All results by broadcasters and Consumer Electronics manufacturers.

Brunel and UAB, as the academic partners in the project, will publish technical and scientific papers in appropriate conferences and workshops. Some of these papers will be published by leading international publishers.

TVC will make a contribution to D4.8 Final Workshop on Access Services at the EBU if it is needed.

The project undertakes to contact appropriate organisations and provide them with Deliverables D4.4, D4.5.

3. The role of project deliverables in dissemination

The deliverables of the pilot of mature access services carried out in the DTV4All project will be fed into existing consultative mechanisms at the European, national and regional level:

- At the European level, the deliverables will provide the European Commission with tangible information for use in the existing DIGITALEUROPE/ EBU/ European disability association forum that is working on access issues in digital television.
- The EBU is a self-funding associate of the project that has mechanisms for promoting technical and service standardisation, interoperability and dissemination of actions aimed at achieving widespread consensus about access services in digital television.
- The existing consultation mechanisms that have been used by the partners to develop, validate, and offer access services in Denmark, Germany, Spain and Italy will be used to expand the body of good practice on which national initiatives are based without compromising the principle of subsidiarity.
- The criteria for success of the project are based on recent European Commission studies on the digital content industry.
- Users from different European Union countries will be surveyed for their views on the reception and quality of the accessible content provided. Results from all the project tasks will contribute to the project obtaining all the data needed to draft a good practice report which will, for the first time, take into consideration the entire value chain: its users, the broadcasters and the available or emerging technologies

The main deliverables of the pilots of mature and emerging access services carried out in the DTV4All project are:

- A. A detailed work plan (D1.1) for the full-scale deployment of mature access services for digital television in four territories of the European Union for a minimum of 12 months' in each territory.
- B. A report (D2.6) containing short-term recommendations on the ways the effectiveness and efficiency of existing services can be improved and the ways in which key technical, organizational, and legal obstacles to their wider introduction across Europe can be overcome.
- C. A report (D3.6) containing medium-term recommendations on emerging access services that merit wider adoption in Europe and the devices and platforms needed to support them.

- D. A report (D4.4) containing descriptions of the mature access services, guidelines for their implementation throughout Europe and recommendations (D4.5) regarding emerging access services for which there is widespread industry support.
- E. Dissemination actions on mature and emerging access services in the form of presentations, proof-of-concept materials, scientific papers and lectures. Such dissemination actions will be organized and held by bodies such as, EICTA, the EBU, the NEM initiative and the committees behind international conferences. (D4.2, D4.3, D4.6)

All the deliverables of the DTV4All project are public and are made available for download from the project web site: <http://www.psp-DTV4All.org/> as soon as they are submitted to the European Commission.

The deliverables that will assist standardisation and dissemination work by the EBU and DIGITALEUROPE are main DTV4All project deliverables B(D2.6), C (D3.6), D (D4.4) and E (D4.2, D4.3, D4.6). Progress towards the twin goals of scalability and sustainability in the short term requires the outputs of deliverables B, D and E. Achieving these goals in the medium term requires the outputs of deliverables D and E.

The target outcomes for pay-television access services delivered by digital cable, digital satellite and IPTV, without pan-European mandatory requirements to provide such services, are Europe-wide availability of subtitling, signing, and Audio Description on channels with either a public service remit or a sufficient market share to make such a target feasible. Quantifying of such target outcomes also falls under the Amsterdam Protocol. Achievement of these outcomes will depend on the business case for writing off existing receiver equipment (Set Top Boxes) over a period of at least 3 years and clear guidelines and roadmaps for the introduction of mature and emerging access services. Key stakeholders here are the European cable operators' association, the main satellite operators and the pay TV operators. Achievement of the target outcomes requires the outputs of deliverables D and E.

The deliverables that will assist dissemination work by the bodies named in order to achieve scalability and sustainability goals are D and E.

4. Working with users associations

The organisation of the process of identifying the issues of interest to users, gathering, analysing, and reporting user feedback on these issues through the pilots carried out the DTV4All project ensures the timely dissemination of the results of the pilots to the relevant users associations. This process is exemplified by the pilot of mature access services undertaken in Denmark by the project.

DR's user group for the pilot tests those with visual impairments, and those with hearing impairments. DR has a longstanding co-operation with national organisations for those with visual and hearing disabilities, primarily Dansk Blindesamfund and their opposite number for the deaf and hard of hearing. In the spring and autumn of 2008, DR held a series of meetings with organisations representing those with disabilities to discuss future action on access services. They are DR's contacts and will help DR and its partner, the University of Copenhagen, recruit a panel of approximately 90 subjects who can take part in user tests in the course of 2009 through their contacts and existing communication channels. The three priorities from DR's perspective are to increase subtitling to 100% in the next two years, agree on new targets for Audio Description on digital terrestrial television and find sustainable solutions for signing before DR's channels on digital terrestrial television migrate from MPEG-2 to MPEG-4 encoding, allowing for High Definition programming. To this end had discussions with the user associations and agreed upon the following research topics:

1. Subtitling

- How is the current live subtitling service of, say, the main news at 18:30-19:00 regarded by users with hearing impairments? (To what extent does an error rate of 10% which is typical of the current system impair user understanding of the news? What kind of errors does the current approach generate and how does this map with the users' expectations of the service?)
- What are the options for live subtitling of news and events and their implications, given that public service television needs to reach its target of 100% subtitling by the end of 2010? (DR is currently using a re-speaking system coupled with speech recognition to generate subtitles for live programmes and have identified a number of problems. Should DR continue to optimise the current system, find funds for purchasing a competing solution, switch to a labour-intensive solution such as the one currently used by TVC in Catalonia or outsource this live subtitling to a commercial access service provider?)

2. Audio description

- What do current users of Audio Description (AD) for fiction think of the service? (Awareness of the existence of the service, ability to find programmes offering AD, access

and usability issues associated with finding and using AD on their own or when viewing television with family and friends).

- What are users' priorities for extending the coverage of programming with AD? (content genre)
- What are the relative priorities of offering, say, a limited amount of AD compared with using the same financial resources to increase the percentage of television for which audio subtitles could be offered? (consultations in November 2008 with those representing the deaf and hard of hearing expressed an interest in discussing the trade-offs between AD and audio subtitles, especially if a generic solution using DVB subtitles and speech synthesis could increase the accessibility of television programming).

3. Signing

- What are users' wishes and requirements in the transition to MPEG-4/HD solutions on digital terrestrial television? (The current solution is a virtual Standard Definition channel that appears on digital terrestrial television from 17:00 – 20:00 with a signer covering two-thirds of the screen height. A new solution using MPEG-4 encoding to deliver both Standard Definition and High Definition programmes that would not exceed the current bandwidth requirements has to be found before the end of 2010 when the existing multiplex is re-engineered to use MPEG-4. Part of this work would be to document the original participatory development model in which a range of solutions were produced and tested with and for their intended users.

User tests to elucidate the three research topics above will start by the end of March and run for the rest of 2009. If required, the period can be extended into 2010. The advantage for all access services is that subtitling, AD and signing now are all in regular service and will continue indefinitely, allowing for additional tests as and when this suits the target users.

5. Events for the creators of access service content

DTV4All project partner UAB is organising events for the creators of access service content which disseminate results of the DTV4All project.

UAB organised a two day seminar on eye-tracking and audiovisual translation in association with the Transmedia Catalonia Research Group and Tobii-Alt64 on the 17 and 18 November 2008 to train all the people who are taking part in DTV4All on the need to test services with eye-tracking, see:

<http://www.fti.uab.cat/transmediacatalonia/eye-tracking/>

All the tests were simulated so that all the testers have exactly the same information on and approach towards the tests, in order to avoid interpretations of the instructions, or personal input. It was in a sense standardisation event as well as a training session.

UAB and the research group Transmedia Catalonia are organising a three-day international seminar with hands-on experience in audio description, at UAB 10th -12th June 2009 in association with DTV4All (<http://arsad2.uab.cat/main.htm>)

Programme:

Thursday 11th June

8: 30 Registration

9.00 Welcoming: Francesc Parcerisas, Dean of the Faculty of Translation & Pilar Orero

9: 30

PANEL 1 Teaching AD in an Academic Context

Agnieszka Chmiel Chair

Catalina Jiménez

Gert Vercauteren

Iwona Mazur

11.00 Coffee

11.30

PANEL 2 Translating AD and Audio subtitling: The future of AD?

Aline Remael Chair

Sabine Braun

Pilar Orero

Gert Vercauteren

Mereijn van der Heijden

13.00 Lunch

14.00

PANEL 3 New AD Markets

Federico Spoletti Chair

Yota Georgakopoulou

Agnieszka Szarkowska

16.00

ROUND TABLE The future of AD in Broadcasting

Joan Greening Chair

Bernd Benecke,

Pere Fabregas, TVC

Broadcasters from DTV4ALL

Dinner 20:00

Mama Café, Dr Dou 10

Friday 12th June

9: 30

PANEL 4 What is relevant in AD? Picking out Relevant Information for Audio Description.

Frederic Chaume Chair

John Sanderson

Eva Espasa

Anna Marzá

11.00 Coffee

11.30

PANEL 5 Latests Research Trends on AD

Sabine Braun Chair

Heidrun Gerzymisch-Arbogast, AD as Multimodal Translation

Iwona Mazur: How audio description influences perception - an eye-tracking study

Jan-Louis Kruger: Focalisation and the use of literary techniques in AD

Bernd Benecke: The use of Intended Hyper Descriptions in the Audio Description process

13.00 Lunch

14.00

PANEL 6 New AD Research

Elena di Giovanni Chair

Juan José Martínez Sierra: Making Humour Relevant in Audio Description

Cristobal Cabeza Film AD in Spanish and Catalan: norms, practice, reception and proposals for improvement

Maija Hirvonen: Filmic audio description as inter-semiotic translation

Josélia Neves Comparing and contrasting...Experimenting with Audio description

17.30 Closing words: Pilar Orero

UAB is organising a two day seminar on respeaking: 2nd International Seminar on Real-time Intralingual Subtitling at UAB 19th and 20th June 2009. The agenda is given in below and includes a presentation on the work of DTV4All. There will be a follow up publication of a book after the seminar: *The Computer Whisperer: Real-time Intralingual Subtitling*, Editors: Eugeni, Orero, Romero, Peter Lang/Rodopi, 2009. The book will contain an introduction by Pilar Orero of UAB and comprise two parts. The first part will consist of a selection of articles from the 1st International Seminar on Respeaking and the second part a selection of the papers from the 2nd International Seminar on Respeaking

Agenda: 2nd International Seminar on Real-time Intralingual Subtitling

Universitat Autònoma de Barcelona, 19th/20th June 2009

Welcome:

Pilar Orero: Welcoming address and introduction to the seminar

(10:30-11:30)

Carlo Eugeni: Respeaking: professional, didactical and applicative aspects

Panel 1

TEACHING:

(11:30-13:30)

Pablo Romero: Teaching respeaking for a PG

Tijs de Korte: Teaching respeaking as a vocational course

Juan Martinez: Teaching respeaking in a multilingual broadcaster

LUNCH (13:30-15:00)

Panel 2

APPLICATIONS 1:

Toby Blizzard: Respeaking the TV – RedBee Media in UK, FR, ES and IT

(15.00-16.30)

Vera Arma: Respeaking the Holy Mass and conferences

Marzocchi: Respeaking the EU Parliament reports

COFFEE (16.30-17.00)

Panel 3

TECHNOLOGY:

Pierre Domouchel –CRI, Canada

(17.00-18:30)

Jean-Marie Barthelemy, Ninsight, France (Ninsight)

Andrew Lambourne, Sysmedia, UK

20th June

Panel 4

APPLICATIONS 2:

Mike Wald: Respeaking as University Access Service for lectures

(9:00- 10:30)

Take Itagaki, DTV4ALL

Paglino: Respeaking conferences interlingually (+demo)

COFFEE (10:30-11.00)

(11-00 – 12.30)

Round table: Subtitles through Respeaking at DTV

Wrap up of conference:

DISCUSSION AND CLOSING REMARKS: Pilar Orero

6. Interaction with participants in the value chain

DTV4All interacts with participants in the digital television access service value chain through a number of forums.

DIGITALEUROPE (formally EICTA)

DIGITALEUROPE combines 40 national digital technology associations from 28 European countries with over 61 direct company members. Altogether it represents more than 10,000 enterprises in Europe with more than two million employees and revenues of over EUR 1,000 billion.

The Coordinator of DTV4All, Dr .T. Itagaki, attended the Meeting eAccessibility of Digital TV, at the EICTA premises, Brussels, 17 September 2008 and gave a presentation on DTV4All.

Dr. T. Itagaki, attended the European Disability Forum (EDF)-EICTA Accessible DTV Meeting, Brussels, EICTA premises, Thursday 30 October 2008, and was involved with the discussion of, and preparation for, the Joint TV experience space at the Vienna e-Inclusion event, the DTV4All involvement in which described in section 7 below. The meeting included a discussion of the usability and technical aspects for the implementation of the additional accessibility features.

DIGITALEUROPE is invited to contribute to DTV4All.

UK Digital Television Group (DTG).

The Digital TV Group is the industry association for digital television in the UK. It is independent, platform neutral and technology agnostic. The BDS (part of Red Bee) and DR are all members of DTG and Peter Molsted of DR and participant in DTV4All plays an active part in the working groups that deal with DVB-SI (Service Information) and Personal Video Recorders, both of which are relevant to the work of the DTV4All project.

Dr Tom Owens of Brunel, the dissemination manager of DTV4All, is a member of the DTG Usability group subgroups on: Audio Description, Human Interface, Subtitles, and Text-to-Speech, and participated in several of their meetings.

NORDIG T standardisation group

NORIDG T is the Nordic region's equivalent of the DTG in the UK. Peter Molsted of DR and DTV4All participant is chairman of the NORDIG T standardisation group working on a specification for Personal Video Recorders for Digital Terrestrial Television in the Nordic region. This will be based on the Freeview Playback (and Freesat Playback) specifications, both of which can be viewed as profiles of the European Telecommunications Standards Institute (ETSI) TV-Anytime standard.

Networked and Electronic Media (NEM) – a technology platform

Networked and Electronic Media (<http://www.nem-initiative.org/>) is one of the European Industrial Initiatives, also known as Technology Platforms, established by relevant key European stakeholders, which address the convergence of media, communications, consumer electronics, and IT as a wide opportunity for future growth, by taking advantage of generalized broadband access, increased mobility, availability of richer media formats and contents, as well as new home networks and communications platforms.

IRT will interface with NEM which is prepared to support DTV4All as a European Union funded project in the Information Communication Technologies domain. The NEM website can be used for an announcement of; the project start, to refer to available project results or to call for expression of interest, etc.

IRT is participating in the Executive Group of the Networked and Electronic Media (NEM) Initiative and is member of the Steering Board. NEM is an industry-led initiative with about 600 institutional members and promotes the large-scale initiative needed to accelerate the pace of innovation and rate of technology evolution to the level that will place European Industry at the forefront of the technology and give users an incredible choice of services. This includes aspects of accessibility and questions on how to include everybody within an ageing society. In addition, IRT is coordinating the drafting and constant updating of the NEM Strategic Research Agenda document the aim of which is to sketch the medium-term development of the Networked Electronic Media landscape.

NHK – a nationwide public broadcaster in Japan

NHK has been invited by IRT into the project, as a non-funded associate partner. A confidentiality agreement has been signed between the DTV4All project partners and NHK. The cooperation with NHK in this project is highly relevant given the importance of barrier-free access to broadcast access services worldwide. The cooperation will be of mutual benefit as technologies developed in Europe could be tested in Japan and NHK developments could become part of the European field tests. This cooperation can encompass all segments of the broadcast access service (audio, audiovisual and data).

7. Informing Politicians and the European Commission

Politicians

The DTV4All project provided demonstrations of mature and emerging access services at the e-Inclusion Ministerial Conference, 30 November - 2 December in Vienna.

The BBC provided the project with a 1-hour long stream from BBC Mux 1 (BBC1, BBC2, BBC3, BBCNews and BBCi) with Audio Description and subtitling on all channels available to use in Vienna, delivered on a set top box that fulfils the receiver requirements sets out in guidelines for UK digital receivers available for download from: <http://www.dtg.org.uk/publications/books.html> as "UK Digital TV Receiver Recommendations" and a universal remote controller this provided an end-to-end demonstration some of the things that DTV4All is trying to achieve in the area of mature access services.

In the area of emerging access services, a presentation of a signer (the sign language “speaker”) for broadcast services delivered as an additional video stream was demonstrated. This service allows the user to show or hide the signer in a second overlay window on top of the broadcast video itself and change the size of this window. To save bandwidth on the broadcast network the additional stream can be delivered via any broadband connection, i.e. Internet Protocol networks such as Digital Subscriber Line. This demonstration is comprehensively described with supporting photographs in the document reporting the delivery of DTV4All deliverable 3.3 available for download from the project web site.

There were many visitors to the DTV4All "table" shown in the photograph below.

The visitors to the table included the Lithuanian minister of culture and a representative of the Norwegian broadcasting/telecom regulatory body. Significantly, they asked how the UK and Denmark had managed to establish their digital television access services. A representative of the Swedish Disability Federation asked the same question. The access services in the UK and Denmark are the result of intervention by the relevant national regulatory bodies in these countries. This was situation to the attention of the European Commission in a presentation made by the DTV4All Coordinator, Dr .T. Itagaki, at the e-Inclusion Partnership Meeting 24th March 2009, European Commission – DG Information Society and Media, Brussels.



European Commission

The following presentations were made on behalf of the DTV4All project to Commission representatives on 14 July 2008:

1. Mature Access Services (Trials Coordinator: Dr Orero, UAB)
 - What is available now and what the issues are
 - What the project will do in its pilots
2. Emerging Access Service (Project Coordinator Dr Itagaki, Brunel)
 - What could be done and what the issues are
3. Dissemination and Relations with the EBU and DIGITALEUROPE (Dissemination Manager: Dr Owens, Brunel)

The Coordinator of DTV4All, Dr .T. Itagaki, attended the e-Inclusion Partnership Meeting 24th March 2009, European Commission – DG Information Society and Media, Brussels, and gave a presentation on the status of e-Inclusion in Digital Television. The slides of this presentation are given below. They highlight the role of national regulators in intervening to drive the roll out of access services and seek to explain to the Commission the approach of the DTV4All project to driving the roll of access services across Europe by dissemination of its results directly to the

relevant national regulators. The EBU will be asked by the project to provide details of the relevant national regulator(s) in each member state of the European Union and for appropriate contact details to ensure the information provided by the project is noted by the regulators.

**Strategic direction
for Total Digital-TV**

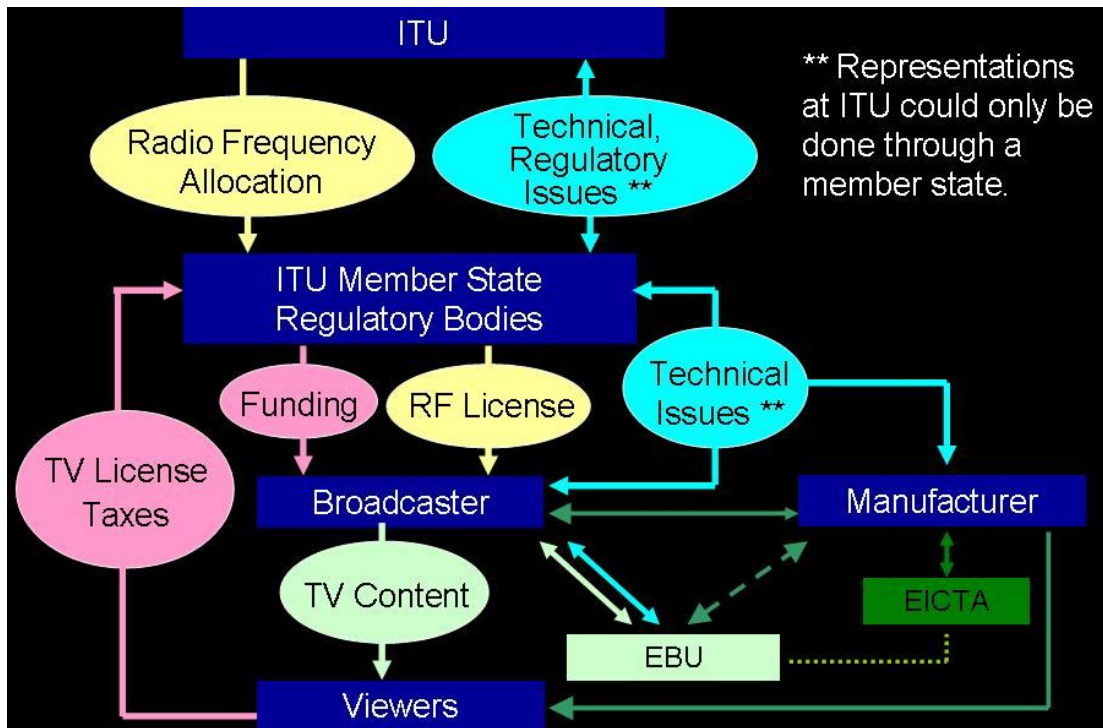
Dr Takebumi ITAGAKI
Co-ordinator of DTV4All Project



School of Engineering & Design
Brunel University (UK)

**Current Situation:
Access Services on Digital TV**

- Digital TV Deployment: to be completed by 2012 for all of the European Union member states.
- Service Delivery: Country-by-Country approach, in terms of technology and regulations.
 - A national regulatory body's remit and that of broadcasters' are within the particular country.
 - Technology: DVB based, but different implementations.
 - Differences in priority, culture, infrastructure, funding system for public broadcasting, legal system...
 - Regulatory Body: can prescribe the minimum requirements for Access Service, **as a part of the license/funding conditions**. ← **legal enforceability**
- A Strong intervention by Regulatory Bodies, like UK and Denmark, helps the roll out of Access Service. << MEAC Project
- Technology Development
 - in consultation with Broadcasters, Manufacturers, Regulatory Bodies and User Associations. e.g. Digital TV Group (UK), NORDIG (IS, NO, DK, SE, FI)
- Technology Dissemination
 - DTV4All Project (CIP ICT PSP) - demonstration
 - European Broadcasting Union (EBU) - training
 - EICTA (→ DIGITALEUROPE)
 - User Associations (RNIB, RNID, ONCE, EDF...)



A Possible Way Forward

Coherent Regulatory Policy over EU, in consultation with EBU, in a form of a minimum requirements list for;

- Access Service Functionalities, Content, Quantity
- Delivery Mechanism

with

- Technical Road Map and Timetable for Roll Out

<< Difficult to add access services over existing Digital TV services

- Frequency resource allocation for extra access service content
- Set-Top-Box update/replacement for extra access service functions

>> **Next window of opportunity**

- Roll out of Digital TV service
- Roll out of (next generation) High Definition Service

The requirement list should be distributed to the national regulatory bodies of the EU member states for consultation with their stake holders, such as national digital TV groups, user associations, broadcasters and manufacturers.

8. Future Plans

The success of the project ultimately hinges on its ability to communicate the accessibility message. Stakeholders including citizens need to know what is currently possible and what access services will emerge in the next five years.

In order to improve the visibility of dissemination measures and thus further the impact and long-term sustainability of the project outcomes the following initiatives are under active consideration:

- a) **EBU website for Business to Business community:** At previous meetings the consortium has discussed the option of using the EBU website to publish reports and guides of good practice. The rationale for this is that it is a natural focal point for information of this kind not just for public service broadcasters but also for other business to business stakeholders in the value chain. The use of the EBU website is awaiting formal approval from the EBU.
- b) **Spots for European audiences:** There are a number of specific groups with their own specific access requirements. Many of them will not be familiar with existing or emerging access services. In all European countries there are public service spots on both public and commercial channels. The rationale here is to use television to promote services that improve television accessibility. Each spot would focus on the needs of one group at a time: what the problem is and how digital television can be used to make television accessible for that group. The project suggests the creation of demonstration television spots on accessibility issues and guidelines for the production of such public service spots in each country or territory. This package then needs to be “sold” to broadcasters, i.e. providing them with a proven approach which they can adopt and produce on their own terms. The cost of production and/or translation needs also be taken into consideration, but in this model the costs in each country/territory would be borne by the television channel in question.
- c) **Building awareness among senior decision-makers – demonstrations:** Here the challenge is that many decision-makers are not aware of the current state of the art, neither are they familiar with the solutions that are emerging and the extent to which these will have a disruptive impact on current production and distribution practises. To raise awareness, high-impact demonstrations need to be tied into major events attended by such decision makers. The aim is to show a film with audio description in multiple languages in connection with conferences or trade shows at Cannes and Vienna (and at the IBC in Amsterdam). In addition to audio description, there needs to be a set of demonstrators where this group can see simulations of emerging services such as speaking Electronic Programme Guides and voice-activated television receivers.

- d) **Standardisation of metadata and icons for access services:** Icons tagging the accessibility offered in television programmes are already standardised across Europe. Nevertheless there is a lack of promotion of existing programming with access services. This is an end-to-end issue from the creation and distribution of programmes to their use. The issues need to be flagged in fora such as the various DVB working parties, the EBU subtitling and metadata working groups and similar groups in the World Wide Web Consortium (WC3).