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MODIBEC Second Overall Priority Workshop

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Abstract:

This deliverable reports on the proceedings of the MODIBEC Second Overall Priority Workshop, which took place in Brussels at the offices of ERTICO 28th November 2008. The workshop aimed to draw a conclusion on the MODIBEC project and to develop the key priority areas identified at the China National Event in Beijing on 27-28th October 2008.

The workshop gave all MODIBEC participants the opportunity to comment on the success of the MODIBEC project in encouraging EU-China cooperation and information exchange in the area of R&D projects in mobile digital broadcasting and telecommunications convergence.

The workshop also gave participants the opportunity to discuss their recommendations and considerations for future possible EU-China co-operation projects in the same field. The conclusions were that the MODIBEC project had been a great success, and the next stage for co-operation, which would be welcome by the partners, would be projects that are more focused on applications development, especially focused on developing joint EU-China interoperable, multi-platform solutions and user-focused applications for in-car and mobile multimedia devices.

Keyword list: Digital Broadcasting, Mobile Communications, Convergence, Priorities, Potential Cooperation Areas

Control sheet

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Chapter 1 - EXECUTIVE SUMMARY

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1.2 Summary

The MODIBEC Second Priority Workshop took place in Brussels at ERTICO's office on 28th November 2008 and was intended to pave the way towards strengthening further EU-China research collaboration. It brought together the MODIBEC partners and other key players in the digital broadcasting and mobile communications sectors. Attendees included high-level Chinese Government (SARFT) officials, European Commission, industry associations and private companies from both Europe and China. The Workshop also intended to discuss the final outcomes from the MODIBEC project, state-of-the-art R&D activities in digital broadcasting and mobile telecommunications convergence, and to discuss priority areas and future EU-China cooperation opportunities, outlining future potential project proposals.

The Workshop also provided an opportunity for the MODIBEC partners to hear from the European Commission about the future EC strategy and objectives for the next round of possible EC funded projects, with an overview of the key priority areas and criteria for future possible projects, in anticipation of the FP7 ICT Call 4 proposals with 1st April 2009 deadline.

The MODIBEC project was considered a success by partners that attended the workshop, especially in terms of building co-operation and understanding amongst European and Chinese partners and creating an open environment for information exchange and shared learning. The consensus was that the next steps for any future projects should build on this environment of co-operation and focus more on R&D projects that focus more on developing added-value applications concepts and multi-platform, interoperable systems integration solutions. The possible project proposals were considered in some detail, namely developing file-casting and multimedia download applications for mobile devices and multi-platform applications solutions for the in-car sector.

1) A file-casting project proposal to develop applications to enable user-tagging of content and multimedia content downloads, building on existing broadcast website applications and creating dynamic and interactive user-interface for mobile devices and seamless interactive services that combined broadcast and telecoms platforms.
2) An in-car applications proposal to develop value-added geo-tagging and interactive applications and also working on in-car systems integration for in-car receivers, including the MMI (man-machine interface) to ensure multi-platform implement (e.g. DAB, DVB, DRM, 3G or CMMB).

The next steps for the possible project proposals is to further develop detailed proposals with the key participants and discuss with other potential partners and attend the ICT Proposers' Day in Budapest on the 22nd Jan 2009, with the final proposal submissions for the ICT Call 4 on 1st April 2009.

Chapter 2 - INTRODUCTION OF MODIBEC 2ND OVERALL P. WORKSHOP

2.1 Introduction

The MODIBEC 2nd Overall Priority Workshop took place at the ERTICO Conference Room in Brussels on 28th November 2008, which was part of a series of meetings aimed at promoting and supporting RTD cooperation between the EU and China on digital broadcasting technologies, with a particular focus on the convergence with mobile communications.

The workshop was intended to give the European and Chinese stakeholders the opportunity to discuss the research and implementation priorities and identified areas suitable for further international cooperation. It was also intended to give discuss the final outcomes from the project such as R&D state-of-the-art activities, developments after the Beijing Olympics and also priorities and action plans for future EU-China cooperation opportunities, including outlining future potential proposals.

2.2 Proceedings

Ms Mariana Andrade MODIBEC project Coordinator, chaired the meeting and gave some initial introductions about the agenda and proposed outcomes, before introducing the key-note speaker Mr Francisco Medeiros of the European Commission.

Keynote from the European Commission

The workshop began with a key note address from Mr. Francisco Medeiros of the European Commission, who outlined the history of the history of the EU-China RTD cooperation in the Networked Media sector and the Strategic Objective 2.6.5 “International cooperation” and the focus areas of digital TV broadcasting and interactive applications and digital broadcasting and mobile convergence. He explained the context of MODIBEC (Cooperation on Digital Broadcasting Convergence with Mobile Communications between Europe and China) as one of four projects, including:

- MOBISERVE (mobile services at big events using DVB-H broadcast & wireless networks);
- MING-T (multi-standard integrated network convergence for mobile & broadcast technologies);
- ROADiBROM (road-mapping Digital Broadcasting-Mobile Convergence).

The success of these projects should be measured based on their creation of further opportunities for the joint development of mobile broadcasting technologies in the EU and China; they encourage further development of added-value converged (mobile and broadcasting) services in the EU and China; they encourage interoperability with EU deployed solutions; and they influence towards the preparation of ICT WP 2009-10 and concrete partnerships reflected in project proposals for the forthcoming FP7 ICT Call 4.

He then introduced the "Networked Media and 3D Internet" and the Call 4 process which opened on 19th November 2008 with a deadline for submissions of 1st April 2009, which focuses on four areas:

a) Content-aware networks & network-aware applications: the architectures and technologies for converged and scalable networking and delivery of multimedia content and services

b) 3D Media Internet: the architectures and technologies for future Media Internet and 3D processing enabling mass distribution, caching, filtering, aggregation and networked content

c) Networked search & retrieval: networked technologies and architectures for optimised networked search, adaptation and access to large-scale distributed multimedia content from diverse sources and scenarios, including physical world information

d) Immersive media experiences and electronic cinema: architectures for next generation multimedia and cinema experiences (beyond HDTV) with better quality-of-experience.

Mr Medeiros discussed the project areas - networks of excellence & support measures (collaboration and/or co-ordination of activities) with projects working to the above four areas of emphasis.

- He explained the objectives are to reinforce the position of industry in Europe in networking and delivery of multimedia content and services, 3D Media Internet technologies and networked search, and also to strengthen European industry in multimedia experiences (beyond HDTV) and electronic cinema.
- The projects should encourage the wider uptake of networked and collaborative platforms based on 3D Media Internet; encourage wider market opportunities for innovative business and social applications based on networked media technologies; and encourage and support global standardisation and European IPR.

Mr Medeiros then gave some remarks on the MODIBEC project, highlighting the impressive efforts by all MODIBEC consortium partners, in particular the role of the Coordinator in the 2nd project year, and the success of the MODIBEC China National Event in Beijing, 27-28 October 2008, with its large participation and strong support from ABS/SARFT.

He reiterated the main objectives of the MODIBEC Project, namely encouraging EU-China cooperation on research and application projects and facilitating the launch of EU-China R&D cooperation projects, especially in broadcasting-mobile communications. He recommended that participants should intend to attend the ICT Proposers' Day in Budapest, Hungary on the 22nd January 2009, which will help researchers with similar or complementary research interests to meet, exchange ideas and to form future potential project consortia.

Opening remarks from Academy of Science, SARFT

Opening remarks from Mr Zou Feng, Vice President of the Academy of Broadcasting Science (SARFT), looked at the state-of-the-art in Chinese research and development projects, and the current situation with standards in China.

- He firstly discussed the rollout of DAB broadcasting in the major cities (now 11 provinces), and its further planned rollout as the national digital radio standard for China, and then explained the focus on the rollout of CMMB in 2009 as the standard for mobile TV broadcasting.
- He explained that CMMB will be on-air in 37 cities across China by the end of 2008 and in over 300 cities by the end of 2009. He reiterated the key principles for SARFT in the rollout of CMMB - including self innovation; uniformity of standards; and the importance of broadcasting & telecommunications convergence. He explained that the terrestrial TV broadcasting digitization plays an important role in the digitization of China's radio and television industry, with more than 200 million TV households.
- He explained that in many ways, from a technical perspective, the CMMB standard is very similar to DVB-H, just some different coding, and the issues facing China about implementation and user-demands are the same as in Europe.
- They have set up a CMMB working group to create an industry-wide group to facilitate development applications and co-ordinate its implementation. China's terrestrial digital TV industry is facing an unprecedented opportunity and the Chinese government must make a lot of investment for improving that existing technologies and equipment don't comply with Chinese standard. He said that CMMB can be a great development and mobile TV is just a part of it, with many other applications and devices (incl. data services and downloads for multimedia players, mobile phones and PC devices).

Overview of MODIBEC

Mr Javier Barrio, Junior Project Manager ERTICO, then gave a brief background to the MODIBEC Project, its participants and activities. He gave general conclusions of the project, stating that it had created high potential for the exploitation and development of joint projects in mobile broadcasting in China, and had created a wide interest from the European industry and research sector to cooperate and participate in mobile broadcasting development in China.

There was a clear understanding of the potential for win-win cooperation and a strong demand and need to introduce technologies which help meet Chinese policy goals. He discussed the Technical Reports that are outputs of the project - D2.1 National Research Policies and D2.2/D2.3 Priority Areas & Action Plans, a state-of-the-art analysis of priority areas of mobile broadcasting for EC–China cooperation and proposals of future specific areas with potential for cooperation.

He then outlined the topics for this MODIBEC 2nd Overall Priority Workshop in Brussels, which were an overview of the stat-of-the art of research and development projects in China and a review analysis of current and future developments in EU-China co-operation. Also a discussion of lessons learned from MODIBEC and the future possibilities and issues in digital broadcasting and mobile communications convergence. The day would also provide the opportunity to discuss some specific proposals, in the areas of digital broadcast file-casting applications and in-car multi-platform applications. The day would conclude with all MODIBEC participants giving an comments on their opinions for future EU-China co-operation in digital broadcasting and mobile communications convergence.

He concluded by stating the aims and objectives of the event, which were to develop the identified priority areas; to give suggestions about EU-China project proposals; to showcase state-of-the-art mobile broadcasting; and to discuss latest adopted policies and technology trials.

Current state-of-the art in China and the recent Olympic experience

This session looked at research and development projects that are ongoing in China in the area of digital broadcasting and mobile convergence. It also looked to the future of possible co-operation between EU and China and gave feedback from China's Olympic experience.

Mr Gao Peng, of the Academy of Broadcasting Science (SARFT), presented an overview of the current opportunities and issues facing the Chinese introduction of mobile digital broadcasting.

- He emphasised the need, as in Europe, for more work to be done on developing compelling and commercially viable consumer applications and also the work needed for implementing the most appropriate and ubiquitous Conditional Access Systems (CAS).
- He also highlighted that there is still a lot of progress to be made on the receiver manufacturing side, to develop universal devices and standard specifications for the Chinese market, but he also said that this is something Chinese partners, such as ABS, are very keen to work with European partners to ensure that receiver devices can be used in many countries not just in China.
- He concluded by saying that ABS are looking forward to developing future partnerships, building on the work of MODIBEC, working on future projects in the field of mobile digital broadcasting and telecommunications convergence, and working with organisations such as ETSI, WorldDMB, ABS, ERTICO, as well as digital broadcasting operators (both European and Chinese).

Mr Nan Hai, of Beijing Jolon, presented an overview of their DAB digital broadcasting services on-air for the Beijing Olympic Games, with its coverage of Greater Beijing area and 16 radio services and 6 TV services on-air, plus some data services (such as stock markets and public/traffic information).

- He explained that consumer research results during the Olympic Games showed that they need to develop more specific services appropriate for mobile devices that enhance the user experience more. Consumers want interactive applications and file download capabilities, and data services not just mobile TV and radio services.
- He said that the success of mobile TV will require implementation in many more mobile phones and it has not yet been possible to fully develop a successful business model and to develop service offerings to be attractive and appropriate for consumers to watch for a reasonable amount of time to make it a commercial success.

Review Analysis: Current and future developments

Michael Ortgiese, Director of PTV (MODIBEC Work Package 2 leader) gave an overview of the key issues surrounding current and future development in digital mobile broadcasting and telecoms convergence. He reiterated that convergence is a multi-faceted and multi-layered process, with convergence of devices, networks, services, businesses, and user expectations/requirements. He then looked at the implications of this for the future in-car applications development and broadcast and telecoms convergence.

- He discussed three key themes in the in-car sector. Firstly, technology trends towards increased emphasis on localisation and safety applications. Secondly, within the scope of MODIBEC, broadcast & WLAN convergence and integration of network, systems and applications. Thirdly, the focus on developing more sophisticated and user-friendly HMI/MMI concepts.
- He discussed the broader subject of changes in user trends, such as increased mobility and its implications for increased demands for travel services, the need for global access and compatibility of services and increasingly complex multiple transmission systems and in business and public/private co-operation in service delivery.
- He highlighted areas that he saw as key areas for future co-operation areas projects, related to in-car system solutions and applications development. He said they should build on existing successes, and focus on traffic information services, such as using TMC and/o r TPEG, and safety oriented services. In particular developing combined broadcast and cellular applications.
- He concluded that from a traffic service provider point-of-view there are many issues that need to be considered and incorporated in developing future EU-China projects, such as:
    - User focused content/applications and a consideration of likely business models
    - Increased value-chain complexity and the various roles of players in convergence and the dynamic/changing consumer and market environment
    - The multi-platform requirements, need for open access and common international implementation. Flexible standards – open at the application layers

Conclusions of the MING-T Project

The next presentation discussed the conclusions from the MING-T project and its relevance to the MODIBEC Project, which gave the opportunity to present its early conclusions and suggestions for future EU-China Research Cooperation**.** Mr Norman Hendrich, of the University of Hamburg, explained the key outputs of the MING-T project, especially the work in looking at the seamless switching and handover between broadcast & telecoms platforms in mobile devices, the demonstrations of DVB-H mobile TV in China in 2007 and 2008.

He said that, regarding both the MING-T and MODIBEC projects, he believed that further R&D work needed to be done in EU-China joint projects in a number of key areas.

- Work on scalable coding applications, to ensure services work on many varied devices with different functionality and capability, locations, bit-rate availability, network situations.
- Further work on multi-network/platform services and multi-standard receivers and China-EU standards compatibility and interoperability, to enable global applications development.
- Other applications and service development work could focus on the CAS and billing/encryption solutions and/or multiple language EPG/ESG
- Other device/receiver capability development work could focus on multi-standard chipsets, software defined solutions, power management and antenna design.

Proposals for future mobile broadcasting research and development activities

The next session looked at two project proposal areas that have been developed out of the MODIBEC project work in two areas identified as key priorities for digital broadcasting and mobile telecommunications convergence. These are projects that already have had interest expressed from a number of existing MODIBEC partners, both European and Chinese, and also some new partners.

1. File-casting Applications

Mr Nick Piggott, the Digital Content Manager at Global Radio gave a presentation proposing a priority area for future R&D co-operation between EU-China - file-casting and on demand mobile media.

- File-casting applications to enable user-tagging of content and multimedia content downloads, building on existing broadcast website applications - direct port of mobile HTML (XHTML), links directly to/from Internet via GPRS/UMTS, simple re-purpose of existing mobile sites with no special tools required, just file copies, and standard (micro) web-browser.
- Developing applications to create a dynamic and interactive user-interface – building on i-pod type applications user-interface for multimedia applications on mobile media players and mobile phones, developing enhanced and personalised EPG's, use-tagging and interactivity.
- Interest has been expressed by ABS (SARFT), GTM and Beijing Jolon to work on a file-casting applications project.

2. In-car Geo/User-Tagging Applications & Systems Integration

Mr Jeff Astle, the Asia-Pacific Adviser for WorldDMB Forum proposed further co-operation in R&D to develop applications solutions for the in-car sector, intended to galvanise and involve the car industry.

- Develop added-value applications and work on systems integration in-car receivers, MMI (man-machine interface), to ensure multi-platform implement (e.g. DAB, DVB, DRM, 3G or CMMB). Geo-tagging and localised services, plus user-tagging (search & retrieval of content) and personalisation. Interactivity, broadcast mobile-purchase applications and downloads.
- Building on Fraunhofer Institute's Journaline concept work, which now needs to focus in-car systems integration. Plus, broadcast & telecoms (end-to-end) infrastructure and multi-platforms to create a common EU-China approach (e.g. building on the Beijing Olympics service demonstrations) to get the applications working in real life case.
- Interest was expressed from various partners – ABS (SARFT), Beijing Jolon, Shanghai JiaTong University (SJTU), AutioNavi, PTV, TomTom, WorldDMB, Fraunhofer Institute and Audi.

MODIBEC partner considerations & recommendations for future R&D projects

The final session looked at outcomes from the MODIBEC CNE in Beijing and gave partners an opportunity to present their conclusions about MODIBEC and considerations for future projects.

Mr Gao Peng from ABS (SARFT) said MODIBEC had built a strong functional platform for co-operation between EU and China on mobile digital broadcasting and telecommunications convergence.

- He said that the Chinese partners are eager to continue and enhance the cooperation with EU and other countries – sharing best practice, providing an open form of communication for sharing the latest information and now working more on joint applications developments.
- He said that although the Chinese government will always encourage the home grown technologies they are also looking to further EU-China cooperation to develop new applications and also to future-proof standards and technologies to ensure interoperability of devices across a wide range of broadcast and telecoms platforms. He explained that they are welcoming of European organizations to become involved in CMMB development, and he gave the example of Nagravision, a European organization already working in a Chinese CMMB Working Group.

Mr Nan Hai from Beijing Jolon said that there were a number of areas that he hoped to have continued co-operation between EU and China partners, particularly now on applications development.

- He said Beijing Jolon is very keen to work on another EU-China project, especially on file-casting and data download applications. He said the development of download and on-demand services (such as music downloads) is a critical element in developing user benefits. Alongside this work would need to be done on CAS systems, copyright protection and digital rights management.
- He said that Beijing Jolon also saw development potential for broadcast visual display advertising potential in mobile and outdoor locations to both mobile and fixed devices. He said that perhaps this could be an element of the file-casting potential project.

Mr Haoyang Liu from WorldDMB Forum spoke on behalf of Mr Den Jin from the Guangdong Mobile TV Media Company (GTM). GTM will be providing the broadcasting system of Guangzhou Asian Games 2010 and they saw this as an excellent opportunity to showcase any new EU-China project.

- Guangzhou Asian Games 2010 real time broadcast multimedia information service and audience guides. The timetable would be to develop the applications from Sep 2009 to April 2010. They proposed that, as well as GTM, the project would involve the Guangzhou Asian Games Organizing Committee. He said that this fits with the proposal on file-casting applications.

Mr Hongsheng Cai from CRTA said that although the MODIBEC project had been a success in developing relationships and information exchange between EU and China partners, the next steps should be much more focused on co-operation on applications development and more tangible R&D work.

- He said that he agreed with everyone that any future EU-China projects should be much more focused on applications development, to develop value added applications that also consider the consumer benefits and potential business models, not just pure research projects.
- He said that any future EU-China projects should involve more equipment manufacturers and SME enterprises, and emphasised that role that CRTA can play, with its relationship with MII (Ministry of Information an Industry) and also that it represents around 150Chinese equipment manufacturers.

Mr Yao Sun from OPG agreed that the two proposals set out before focused on the key priority areas, and from OPG's point-of-view, specifically around in-car applications (traffic information systems) and file-casting applications (electronic newspaper).

- The in-car applications project should embrace real-time traffic information systems and work on solving the format of message source and how the transmission channel is integrated into the traffic-information system. He said that there is also need to develop traffic navigation head-end system and terminal user-interface. He said that the project would attract interest from a wide range of Chinese partners, such as OPG, XMITIC, Autonavi and also in-car device manufacturers.
- The file-casting applications project should embrace broadcast electronic newspapers – to deliver multimedia news content to mobile devices using digital broadcasting means to shorten news update time and save costs. Organisations interested include OPG and Jiefang Daily Newspapers.

Ms Yu Sun, from the WorldDMB Forum reported on the feedback from the recent MODIBEC China National Event in Beijing.

- She highlighted that participants agreed that is achieved its specific objectives.
  - To further develop the identified priority areas;
  - To give suggestions about future European-China project proposals;
  - To showcase state-of-the art mobile broadcasting developments;
  - To discuss the latest adopted policies and technology trials in both China and Europe.
- She said the event gave partners and other participants the opportunity to explore and identify priority areas for possible future joint R&D projects, specifically interoperability of standards, interactive broadcast/telecoms services and in-car applications.
- She concluded that she was pleased to see that this has now enabled the proposals and recommendations put forward at today's 2nd Priority Workshop – with the agreement of focusing on in-car geo-mapping and tagging applications and data content file-casting applications.

Mr Peter Zhou from Autonavi said that the in-car applications development and system integration (multi-platform solution) project proposal was very timely and Autonavi are keen to participate.

- He said Autonavi was involved in recent CMMB TPEG demonstration project and also Autonavi will be the lead partner for traffic information systems and applications for up-coming Shanghai EXPO in 2010, which would be an excellent showcase opportunity for the next EU-China project.

Mr Micheal Ortgiese from PTV again highlighted the importance of future projects being more focused on joint EU-China applications development, looking at systems compatibility, integration and protocols.

- He said that focusing on mobile applications that will bring together a variety of infotainment and entertainment applications and also consider the supply/value-chain models and all the key players across the value-chain, both in the EU and China.
- He said that, from an in-car perspective, looking at the user-interface and user-experience of various applications was an important next step. He said that PTV would be keen to work with WorldDMB, AutoNavi and others on any future projects, as proposed earlier in the day.

Closing Remarks

The event was concluded by Ms Mariana Andrade of ERTICO thanked all the participants for their contributions. She concluded the workshop by encouraging partners to work together to develop the proposals that had been agreed and developed during the workshop, explaining the timetable for the next round of possible EU-China projects. She also handed out a schedule for the final requirements for all partners to complete in order to conclude the MODIBEC project.

Chapter 3 - MODIBEC 2ND OVERALL PRIORITY WORKSHOP REPORT WORKSHOP OUTCOME

The 2nd Priority Workshop brought together the MODIBEC partners and some key decision-makers from Chinese organisations within the digital broadcasting and mobile convergence areas. It reviewed the MODIBEC project and discussed the range of partners' feedback and considerations for the possible next steps for future joint EU-China R&D projects.

The MODIBEC partners had the opportunity to provide and present their future considerations and recommendations. It also provided an environment to have further discussions regarding some of the key priority areas identified in the Beijing China National Event and to develop a consensus on the emphasis of any future projects. It identified and developed these priority areas and developed some possible future project proposals for the next round of EC projects.

The Workshop also provided an opportunity for Mr Medeiros from the European Commission to communicate to all the MODIBEC partners about the future EC strategy and objectives for the next round of possible EC funded projects. All the MODIBEC partners appreciated Mr Medeiros's presentation, which gave a thorough overview of the key priority areas and the emphasis of future possible projects, and his thorough explanation of the process required towards the FP7 ICT Call 4, which has a deadline for proposals of 1st April 2009.

At the end of the Workshop, all the participants agreed that they felt that the MODIBEC project had successfully developed close working relationships between European and Chinese partners and had been an excellent platform for information exchange. They also agreed that further action needs to be made for future joint R&D development in the digital broadcasting and telecommunications, and there was a strong willingness to co-operate on future projects.

The Workshop enabled partners to discuss future possible EU-China R&D project priority areas and all agreed that any projects should continue to focus on interoperable and multi-platform solutions working on both European and Chinese standards, and also a focus on developing service and user focused applications rather than just on broadcast and telecoms technology platforms and devices. The two main areas of focus which came out of the Workshop developing file-casting and multimedia download applications for mobile devices and multi-platform applications solutions for the in-car sector.

- The file-casting proposal focused on developing applications to enable user-tagging of content and multimedia content downloads, building on existing broadcast website applications and creating dynamic and interactive user-interface for mobile devices and seamless interactive services that combined broadcast and telecoms platforms. Many partners, European and Chinese, including WorldDMB, ABS (SARFT), Beijing Jolon, CRTA, OPG and GTM are interested in the project.

- The in-car applications proposal focused on developing value-added geo-tagging and interactive applications and also working on in-car systems integration for in-car receivers, including the MMI (man-machine interface) to ensure multi-platform implement (e.g. DAB, DVB, DRM, 3G or CMMB). This will build on the Fraunhofer Institute's work in this area, and in addition to Fraunhofer, many partners expressed an interest in working in this area – including PTV, AutoNavi, ABS (SARFT) and WorldDMB.

Chapter 4 - GENERAL CONCLUSIONS AND NEXT STEPS

The 2nd Overall Priority Workshop furthered the increasingly close links between European and Chinese digital broadcasting and mobile telecommunications experts from industry, research and public sector bodies to encourage EU-China cooperation on research and application projects.

The Workshop again provided an environment to promote and support R&D cooperation between EU and China on digital broadcasting and mobile telecommunications and to discuss standardisation issues and policies in the EU and China to strengthen cooperation in this area. It also continued to help provide the Chinese authorities, research bodies and industry to learn from the European experience and leveraging previous and ongoing EU-China IST projects in similar areas.

It achieved its main objectives to highlight the state-of-the art mobile broadcasting developments and discussing the latest adopted policies and technology trials in both China and Europe and to further develop the identified priority areas and to discuss possible future EU-China project proposals. It discussed the emergence of added-value converged technologies and their interoperability with EU deployed solutions. The Workshop created participation, interaction and input from industry experts and key decision-makers, generating fruitful discussions about potential future cooperation in mobile telecommunications and digital broadcasting.

The MODIBEC project was considered a success by partners that attended the workshop, especially in terms of building co-operation and understanding amongst European and Chinese partners and creating an open environment for information exchange and shared learning. The consensus was that the next steps for any future projects should build on this environment of co-operation and focus more on R&D projects that focus more on developing added-value applications concepts and multi-platform, interoperable systems integration solutions.

The project explored many aspects of mobile digital broadcasting and telecommunications from a wide range of perspectives. In relation to the European Commission's FP7 ICT Call 4 for future R&D projects, two projects were discussed in great detail, namely a project that builds on in-car applications solutions and a project that builds on file-casting and downloads applications to mobile devices.

The next steps for the possible project proposals discussed at the 2nd Priority Workshop will comprise:-

- To further develop the project proposals with the key participants and to identify the line-up of likely partners and then to develop a detailed proposal paper which clearly outlines the projects objectives and plan.
- The key participants to attend the ICT Proposers' Day in Budapest, Hungary on the 22nd January 2009, which will help researchers with similar or complementary research interests to meet, exchange ideas and to form future potential project consortia.
- To produce the necessary paperwork for proposals to be submitted according to the EC Call4 procedures by March 2009.

The 2nd Overall Priority Workshop participants list

1	University of Hamburg	Mr	Norman	Hendrich
2	Ertico	Mr	Javier	Barrio
3	Ertico	Ms	Mariana	Andrade
4	BBC	Ms	Lindsey	Mack
5	European Commission	Mr	Francisco	Medeiros
6	Dolby Germany GmbH	Mr	Toni	Fiedler
7	TomTom	Mr	Frits	de Jong
8	Global Radio	Mr	Nick	Piggott
9	WorldDMB	Mr	Jeff	Astle
10	WorldDMB	Ms	Yu	Sun
11	WorldDMB	Mr	HangYao	Liu
12	SARFT/ABS	Mr	Feng	Zou
13	SARFT/ABS	Mr	Peng	Gao
14	CRTA	Mr	Hongshen	Cai
15	CRTA	Mr	Weishan	Ma
16	OPG	Mr	Yao	Sun
17	OPG	Ms	Lijun	Zhang
18	AutoNavi	Mr	Pin	Zhou
19	AutoNavi	Ms	Li	Pan
20	PTV AG	Ms	Krsten	Wildberger
21	Jolon	Mr	Hai	Nan
22	Jolon	Ms	Ming	Hu
23	Jolon	Mr	Xunduo	Zhao
24	Jolon	Mr	Miao	Liu
25	PTV AG	Dr	Ortgiese	Michael
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