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## DA0.4 – Report on Raising Public Awareness of MUSE

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With inputs from partner representatives

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<i>Keywords</i>	Broadband, Access, Multi-Service
<i>Abstract (for dissemination)</i>	The present deliverable gives a survey of the actions taken by the partners to create public awareness of MUSE and Broadband Access. In most cases specialised people are addressed, but some actions are also for a broader audience.

## DOCUMENT HISTORY

Version	Date	Comments and actions	Status
01	10.02.2006	Compilation of partner inputs and previous working documents on exploitation and dissemination into one deliverable.	Draft
02	14.02.2006	Review comments reworked	Final

## TABLE OF CONTENTS

DOCUMENT INFORMATION .....	2
DOCUMENT HISTORY .....	3
TABLE OF CONTENTS .....	4
1 MUSE ON THE WEB .....	5
2 PUBLIC NEWSLETTER .....	5
3 PRESS RELEASE .....	5
4 PUBLIC DEMONSTRATIONS OF MUSE LAB TRIAL .....	6
5 PUBLIC AWARENESS ACTIONS TARGETED TO TECHNICAL PEOPLE .....	7
6 INDIVIDUAL ACTIONS BY PARTNERS .....	8
APPENDIX: PRESS RELEASE .....	11

## 1 MUSE ON THE WEB

MUSE advertised its results in a public Website: [www.ist-muse.org](http://www.ist-muse.org).

The website gives a survey of the MUSE objectives, partners, achieved publications, and announcements of public events. It allows for requesting public deliverables of MUSE.

MUSE has reached a wide coverage on the web. E.g. a search for the string "IST+MUSE+Broadband+Access" on Google yields about 20000 entries.

## 2 PUBLIC NEWSLETTER

MUSE has issued quarterly public newsletters per e-mail, which reached 750 addressees. They include not only technical engineers outside of MUSE, but also marketing people and decision makers. The newsletter briefs about the highlights of the project. It invites the readers to consult the MUSE public website for more information and documents that became available.

## 3 PRESS RELEASE

MUSE issued one press release. The text is included in the appendix.

Table 1 gives a survey of the press coverage achieved by MUSE, mainly by the press release, but also by other initiatives.

**Table 1: Press coverage of MUSE**

Date	Place	Title	Link
03.05.2004	Lightreading	Alcatel Announces EU & China Projects	<a href="http://www.lightreading.com/document.asp?doc_id=52017">http://www.lightreading.com/document.asp?doc_id=52017</a>
06.05.2004	VNUNet	Muse Spanish press release	<a href="http://www.vnunet.es/Actualidad/Noticias/Comunicaciones/Internet/20040505024">http://www.vnunet.es/Actualidad/Noticias/Comunicaciones/Internet/20040505024</a>
18.05.2004	ISDN Server (Czech Webserver with news on BB)	MUSE - broadband pro všechny Evropany (Czech translation of MUSE press release)	<a href="http://www.isdn.cz/clanek.php?cid=5767">http://www.isdn.cz/clanek.php?cid=5767</a>
11.10.2004	Total Telecom	Broadband services: Making Ethernet pay	<a href="http://www.totaltele.com/view.asp?ArticleID=112075&amp;Pub=tt">http://www.totaltele.com/view.asp?ArticleID=112075&amp;Pub=tt</a>
22.04.2005	De Standaard (Belgian Newspaper)	Nieuw competentiecentrum voor digitale mediatechnologie (MUSE's GSB cited in article about 1 year if IBBT (Interdisciplinary institute for BB Technology))	<a href="http://www.standaard.be/Artikel/Detail.aspx?artikelId=GS0EA802">http://www.standaard.be/Artikel/Detail.aspx?artikelId=GS0EA802</a>
01.06.2005	DSL Forum	Very High Speed DSL Standard To Accelerate Universal Access To Multiple Broadband Services (MUSE project co-ordinator quoted in DSL Forum Press Release)	<a href="http://www.dslforum.org/dslnews/pr.shtml">http://www.dslforum.org/dslnews/pr.shtml</a>

## 4 PUBLIC DEMONSTRATIONS OF MUSE LAB TRIAL

### **MUSE demo at BB Europe**

MUSE has made one public demonstration at BB Europe in Bordeaux, 12-14 December 2005. This conference covers not only technical progress in the field of broadband, but also socio-economic and strategic issues. Therefore, there also were many non-technical people among the 185 attendees. The demo of MUSE allowed for increasing the awareness of the capabilities of future Broadband Access solutions.

MUSE also issued 200 **leaflets** about the project and the demonstrator.



**Figure 1: MUSE booth at BB Europe conference in Bordeaux, December 12-14, 2005.**

### **MUSE demo at NOC 2006**

MUSE plans to make a public demo at the NOC conference in Berlin, July 11-13, 2006.

NOC 2006 will be hosted by partner HHI. MUSE will take the opportunity to publicly show a MUSE lab trial (Optical Access) at HHI and another MUSE lab trial (Access Platform) at the nearby DT facility, both in Berlin.

### **Permanent exhibition and demos to visitors of partners**

Partners have continuously shown MUSE lab trials to external visitors.

This was mainly the case at sites of partners where lab trials were integrated and tested:

Alcatel, Ericsson, Lucent Technologies, TNO, ACREO, DT, UC3M. In the future also

Telefonica I+D, PTI, and other partners will be able to show MUSE lab trials to visitors.

At Alcatel and Ericsson, a copy of the MUSE lab trials will be placed in a public exhibition area on their premises. It gives visitors an impression on future capabilities beyond the product range. This will even enlarge the audience, since not all visitors that come to see the products have time to pass by the research labs.

## 5 PUBLIC AWARENESS ACTIONS TARGETED TO TECHNICAL PEOPLE

The objective of the present deliverable is mainly to report on actions to create awareness among a broader non-technical audience. For completeness however, a short summary of dissemination actions to a more specialised audience is listed in Table 2. More details are described in the deliverable DA0.2 “Plan for use and dissemination of knowledge”, which is released as companion document to this deliverable.

**Table 2: List of dissemination actions  
(for more details see also deliverable DA0.2)**

Date	Type	Type of audience	Countries addressed	Size of audience	Partner responsible/involved
Continuously	90 papers or presentations at international conferences (detailed publication list cf. <b>Error! Reference source not found.</b> )	Research	EU, Global	-	All
11-13/5/2005	DSL Forum, Plenary summit, Budapest, “Introduction to MUSE and relation with standardisation” (resulted also in quotation in DSLF Press Release)	Standardisation	Global		ALC (as coordinator)
17-21/1/2005	ETSI-TISPAN #05, Plenary session, Sofia Antipolis, “MUSE general presentation”	Standardisation	EU, Global	1000	ALC (as coordinator)
29/6-1/7/2004	NOC 2004, Eindhoven: two sessions on “BB Access for All” organised by MUSE. 9 MUSE papers and 2 external papers.	Research	EU	100	TUE, BT/All
6/9/2004	ECOC 2004, Stockholm: half day symposium on “BB for All and Fibre Access” organised by MUSE. 4 MUSE papers and 4 external papers from Japan, Korea, North America, and Sweden.	Research	Global	250 in session	ACREO, TS/All
8-10/12/2004	BB Europe 2004, Brugge: 3 sessions on BB Access co-organised by MUSE and BROADWAN. 6 papers from the MUSE project.	Research, developers, policy makers	EU	130 (entire event) 20-40 people per session	IMEC (IST BREAD) / All
20-21/12/2004	MUSE Winter School on BB Access: 2 day training with in-depth tutorials on general network aspects, as well as MUSE specific network architectures.	Research, developers	EU	20	UC3M/All
May 2004	Press release in 3 languages	Research, developers, decision makers,	Global	-	ALC/All

Date	Type	Type of audience	Countries addressed	Size of audience	Partner responsible/involved
		Telecom sector			
Dec 2004	Webvideo on Ericsson website	Telecom sector	Global	-	EAB
June 2005	INFOCOMM 2005 The Art of Technology of Video over IP	Research, developers, decision makers	Global		THON
5-7/7/2005	NOC 2005, London; MUSE sessions on BB access	Research	EU	140	BT/All
5/7/2005	MUSE sessions and short courses on BB access (London, in conjunction with NOC)	Research	EU	40	UoE
25-29/9/2005	ECOC 2005, Glasgow: Invited MUSE paper and various regular papers. Co-chair and invited paper in workshop prior to ECOC Poster in IST booth organised by e-Photon-ONE	Research	Global	500	UE, BT, LU, ALC
3-6/10/2005	MUSE Autumn school of BB Access, Ghent, (Ethernet network, QoS, SIP + practical lab exercises)	Research, developers	EU	15 (limited by lab set-ups)	IMEC
14/10/2005	MUSE Workshop on optical access technologies, Berlin (in conjunction with VDE-meeting)	Research, developers	EU	30	HHI/All
12-14/12/2005	BB Europe: MUSE booth with lab trial, leaflets 12 oral papers in regular programme	Research, developers, decision makers	EU	185	All
11-13/07/2006	NOC 2006, Berlin with dedicated MUSE sessions and public demo of lab trials	Research, developers	EU	200	HHI, BT
14/07/2006	MUSE Summer School in conjunction with NOC 2006, Berlin	Research, developers	EU	40	NTUA

## 6 INDIVIDUAL ACTIONS BY PARTNERS

Most partners have organised internal workshops and trainings targeted at a broad audience:

- internal events in order to create a broader awareness across the large organisations,
- external events to train students (by University partners) or customers (by Vendors).

In addition to the many technical papers and deliverables, partners have also distributed internal position papers to promote the solutions to internal decision makers, managers and marketing people.

Some companies also created visibility to MUSE at “open door days” or “science days”.

EABS has produced three videos related to MUSE and made them globally available. One of the videos describes MUSE and its purpose and includes an interview with Augusto de Albuquerque. One video describes the projects itself and includes interviews with Peter Vetter from Alcatel and Rob van den Brink from TNO. The third video describes how broadband access can be used in Arjeplog, Sweden. Arjeplog has a population of 3,500 in an area as large as Belgium. The town was once dependent on lead mining but the industry closed down two years ago. Broadband brought recovery and economic growth.  
<http://www.ericsson.com/ericsson/corpinfo/publications/telecomreport/archive/2005/january/index.shtml>

**Table 3: Overview of individual partner actions to increase awareness on MUSE results**

Date	Action for public awareness	Type of audience	Countries addressed	Size of audience	Partner responsible/involved
2004-2005	Internal training on BB Access with MUSE results at Alcatel University	Developers, managers, sales	Belgium, France, Germany	100	ALC
Dec. 2005	Alcatel CTO event with MUSE poster and demo in exhibition	Developers, managers, sales	Belgium	200	ALC
2004-2005	Position papers on innovations on Multi Service Access from MUSE	Developers, managers, sales	Global	1000	ALC
Jan 2005	An MUSE information video published on the Ericsson external web site	Research, developers, decision makers	Global	Web	EABS, ALCB, TNO, EC,
June 2004	LQ & M field measurement workshop at TS central offices in Stockholm area	Technical experts	Global	10	LTH; TS, EABS, TNO, TI
May 12, 2005	Ericsson Research days in Kista: MUSE work on LQ&M was presented and general poster on MUSE project	Research	Global	1000-2000	EABS
October 26,27 and 28, 2005	Ericsson Technical Council, Kista: LQ&M work was part of a xDSL-demonstration	Research	Global	100	EABS
2004 - 2007	National Research Programs (B@Home)	Research	NL	20-40	LU, TUE, TNO
Nov. and Dec. 2005	RGW MUSE demonstrations for school's visitors at PTI	Students from different school levels	PT	150 (groups of ~15)	PTI
April 2005, Turin	Family Day (4 week-ends in April 2005) Guided visits through the laboratories of Telecom Italia premises in Turin: optic fibre lab, service lab (fixed-mobile convergence and video communication)	Employees' families	Italy	900	TI
May, 4	Press day	Italian press	Italy	30	TI

Date	Action for public awareness	Type of audience	Countries addressed	Size of audience	Partner responsible/involved
2005, Turin	Visit through the laboratories of Telecom Italia premises in Turin. Demo of the Broadband Home Lab.				
Oct, 27 – Nov, 8 2005, Genova	“Festival della scienza” (www.festivalscienza.it) TI’s stand and a set of conferences (among which one on home broadband services and applications).	Public citizens	Italy	50.000 (whole festival)	TI (as participant to the festival)
2005	Internal publications	All	10+	1000+	FT + affiliates
2005	Internal seminars	All (mostly technical but not only)	France (major)	50+	FT (major)
2004 - 2005	Internal seminars	Experts and Team leaders	Sweden and Finland	20	TS
2005 2004-2005	MUSE has have impact on the following courses: - OFDM for Broadband Communication (T. Magesacher) - Signals and Communications (P.O. Börjesson) - Principles of Spread Spectrum Multiple Access Communications (G. Lindell) - Digital Communications (G. Lindell) - Digital Communications, Advanced Course (G. Lindell) - Design of Digital Circuits (S. Höst)	Students Students Students Students Students	Europe Europe Global Global Sweden	15 70 20 120 50 160	LTH LTH LTH LTH LTH LTH
Oct. 2005	Organisation of VDE-ITG conference on broadband access in Germany	Network operators, Service providers, Developers, Decision makers	Germany and neighbouring countries	150	HHI
Dec. 2005	Inputs to CENELEC FTTx Handbook Draft (TC 86A)	Decision makers, Installers	Global	n.a.	HHI
Feb. 2004	University open days and seminars: The work conducted under the MUSE banner is exhibited and discussed in a wider context with due reference to MUSE.	Newspapers, public	UK, EU	50 – 100	UOE

## APPENDIX: PRESS RELEASE

Issued in English, French, Spanish, and Czech (only English version given here)

### **MUSE project: delivery of broadband services to every European citizen**

**May 3rd, 2004** – MUSE (MULTi Service access Everywhere) is a European Union research & development project that started its research activities in January 2004. The objective of MUSE is research and development of a future low-cost, multi-service access and edge network, enabling the delivery of broadband services to every European citizen. Innovative access architecture and functions will be investigated which will allow the European telecommunications industry to offer services such as e-learning, teleworking, videoconferencing, gaming, or video-on-demand in a scalable and cost-effective way ([www.ist-muse.org](http://www.ist-muse.org)).

The international MUSE consortium groups 30 partners, encompassing major operators, system vendors, component vendors, research institutes and universities. Being an Integrated Project of the "Information Society Technologies" (IST) priority of the 6<sup>th</sup> Framework Program (FP6), MUSE is part of the "Broadband for All" IST Strategic Objective. With a 2-year duration first phase, it is valued at EURO 34 million, of which EURO 18.6 million is funded by the European Commission.

"A diversity of complementary technologies for the delivery of broadband services is emerging. In order to succeed in the objective of "Broadband for All", an end-to-end solution needs to be elaborated", explains MUSE coordinator Peter Vetter, Alcatel. "With almost all major players in the consortium, MUSE is well positioned to create a consensus on the future access network for Europe".

Consequently, research activities will focus on the end-to-end architecture, as well as on new concepts to embed multi-service capabilities in an open access platform. First mile solutions studied in MUSE will be both scalable in bandwidth and user density to anticipate the expected evolution in user requirements, services and coverage. As many new applications will be triggered from appliances in the home, MUSE will also address the interworking of the home gateway with the access network. An important objective is a low investment cost and operational cost to achieve ubiquitous broadband access in Europe.

MUSE is organized in four subprojects: Alcatel coordinates the subproject "access architecture" aiming towards a common access network architecture. Innovative solutions and concepts will be demonstrated and evaluated in end-to-end lab trials in three implementation oriented sub-projects with various deployment scenarios: a "migration scenario" from ATM to packet (Ethernet, IPv4, IPv6) coordinated by Alcatel, a "non-legacy scenario" optimized for Ethernet and IPv6 coordinated by Ericsson, and a "high bandwidth scenario" integrating new access technologies (VDSL, optical fibre loop) coordinated by Lucent Technologies' Bell Labs.

To achieve effective communication and consensus in different technical areas across the subprojects, four task forces will contribute to position papers, common specifications and comparison of different approaches. They will also extensively contribute to standardization, which is key to achieve low-cost and interoperable solutions.

See participants list below

### **About Information Society Technologies (IST) in EU's 6th Framework Programme (FP6)**

The focus of FP6's IST part is on the future generation of technologies in which computers and networks will be integrated into the everyday environment, rendering accessible a multitude of services and applications through easy-to-use human interfaces. This vision of "ambient intelligence" places the user at the center of future developments. The research effort aims to bring IST applications and services to everyone, every home and to all businesses.

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<b>MUSE participant names</b>
Alcatel
Ericsson
Lucent Technologies
Siemens
Thomson
Nextream
Infineon Technologies
STMicroelectronics
British Telecommunications
France Telecom
Portugal Telecom Inovação
TNO Telecom (formerly KPN Research)
Telefónica Investigación y Desarrollo
TeliaSonera

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Telecom Italia
T-Systems Nova
The Broadband Society of Aarhus
Fundacion Robotiker
Interuniversitair Micro-Elektronica Centrum vzw (IMEC)
Institut National de Recherche en Informatique et Automatique (INRIA)
Budapest University of Technology and Economics
Institute of Communication and Computer Systems of the National Technical University of Athens (ICCS/NTUA)
Lund University
Acreo AB
Universidad Carlos III de Madrid
Fraunhofer Institute for Telecommunications, Heinrich-Hertz-Institut (HHI)
Technische Universiteit Eindhoven
University of Essex