Project Number: 248495
Project acronym: OptiBand
Project title: Optimisation of Bandwidth for IPTV video streaming

Deliverable reference number: D9.4

Deliverable Title: Awareness and Wider Societal Implications

Due date of deliverable: M30
Actual submission date: 30/07/2012 (M31)

Start date of project: 1 January 2010   Duration: 32 months

Organisation name of lead contractor for this deliverable: Corrigent Systems Ltd.

Project co-funded by the European Commission within the Seventh Framework Programme (2007-2013)		
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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1. OptiBand's Targeted Audience

In order to select the most efficient modes of communication about the project, as well as ensuring the maximum penetration of such messages and thus the highest possible impact, the relevant target groups which constitute OptiBand's audience had been identified.

The activities were tailored to the relevant target audience identified, in an effort to optimise the impact reached. The identified groups of interest consist of organisations, commercial companies and individuals who either have an interest or may be affected by the OptiBand project.

Three levels of target groups are listed below:

1.1 Primary target group

The primary target group is the main group within the audience targeted by OptiBand. The major part of the dissemination efforts had been directed to this group, in which the scientific, economic and social impact in terms of potential collaboration, future exploitation and societal implications – is expected to be the highest. It was by mapping the needs and interests of this target group, building upon the activities accomplished under "*T.1.1: Stakeholders Requirements Collection*", as well as by understanding the most efficient methods to reach it, that OptiBand's impact was and will be in its optimal form.

The OptiBand Primary Target Audience Group is identified as comprised of:

- **Clients of the** OptiBand's consortium, which are mainly telecom operators, who operate or intend to operate an IPTV network.

- **Players in the IPTV ecosystem**, which are IPTV equipment developers and providers, such as head-end vendors, encryptor vendors, VOD service providers and so forth.

1.2 Secondary target group

The OptiBand Secondary Target Audience Group comprises of actors affected or influenced by the results of the OptiBand project. Complementing the primary target group, this group includes:

- Relevant researchers, academics, standardisation bodies, industry experts or influencers (members of the professional Press, for example) and organisations engaged in the use and development of video distribution services in general, and IPTV / Internet-TV (OTT) at the various National, European and Global levels.

- OptiBand's industrial members' **manufacturing partners**, which are DSLAM providers and network transport equipment vendors.

1.3 Tertiary target group

The main part of the scientific, economic and societal impact strategy targets stakeholders having an impact in planning or achieving some R&D activity, hence the general Public at large is not identified as a direct group of interest. Nevertheless, this group, and its leading opinion shapers (in the Media, etc.) is also affected by the OptiBand results, as the main end-users will be members of the general public. Therefore, even though no focused dissemination actions have been aiming for this group, widely targeted activities such as the public website have also reached these groups. Besides, the general dissemination material generated by the project (the project's leaflets, posters and website), were made so as to fit the experience and understanding of a general public, and to raise public awareness of the potential benefits brought by the OptiBand consortium to the IPTV and Internet-TV experience.

2. OptiBand's Societal Implications

OptiBand-enhanced IPTV and Internet TV deployment and service provisioning in the developed countries will accelerate the on-going trends of variety and richness of choice offered to the media consumer wherever and whenever they choose to consume the media on one hand and operator consolidation on the other hand. This stems for the economic benefits that those OptiBand-enhanced services' business models will yield, in comparison with state-of-the-art conventional TV and IPTV/OTT distribution.

Furthermore, OptiBand-enhanced IPTV deployment and service provisioning in developing regions will accelerate overcoming the formidable challenges faced today by providers of traditional and contemporary TV services. Typical ICT environment in these regions is characterised by low broadband penetration, lack of infrastructure, low per capita income and difficult regulatory climates[1]. The main challenge in developing countries is therefore to develop an efficient and high impact IPTV deployment model which can be sustained in such an environment. Such model has to be better aligned with the target market, affordability, and rapid technology adoption. The OptiBand enhancement technologies are indeed the kind of enabler or catalyst agent, able to help accelerate the change and make it happen across multiple devices and media types.

Analysing the expected horizontal societal implications of IPTV and Internet-TV in general and of the OptiBand-enhanced TV distribution technologies in particular, we may generalise that the optimisation, cost reduction and backwards-compatible deployment made possible by OptiBand, will complement patterns of behaviour in five domains: 1) media access inequality (the "digital divide"); 2) community reach and social change; 3) political participation (the "Facebook revolutions"); 4) cultural diversity and cultural participation; and 5) evolution of governments, organisations and economic institutions.

Improved Media access provides viewers access to arts, music, health education, religion, new technology and a wide spectrum of information. Such technology is a venue for inspiration and enrichment and it also allows the viewer to become engaged in issues that have personal and societal implications. Viewers are able to witness everything from presidential debates, to Olympic Games, to wars being fought right in front of them. They discover ways to renovate their homes, look like runway models, remotely vote in-person for up-and-coming artists, and give their hearts to favourite causes, all in one afternoon. The potential for individual (democratised "YouTube"-type media production) and societal transformation is incredible, as a big chunk of life is captivated by distributed Media.

At the same time modern Media diffusion phenomena, such as reality TV and targeted advertising, convey or inspire recognised adverse outcomes including violence, gender-bias, language deterioration and distorted reality. They can also easily increase the visibility of negative role models. Part-and-parcel of the impact of the accelerated trends towards ubiquitous media access, contributed to by the OptiBand innovations, call for societal and individual responsibility and to educate the Public to exercise proper caution and a balanced judgement of the messengers' possible motivations, when analysing diffused information.

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1 Ref.: An efficient community-centric IPTV deployment model for developing regions, Marungwana, K.O.A. et al, ICUMT 2009

3. Report on Societal Implications

Table 3-1 OptiBand Report on Societal Implications

A	General Information *(completed automatically when **Grant Agreement number** is entered.*
• **Grant Agreement Number:**	248495
• **Title of Project:**	OptiBand — Optimization of Bandwidth for IPTV
• **Name and Title of Coordinator:**	Yossi Barsheshet Title: Financial Director, Orckit

B	Ethics	
1. Did your project undergo an Ethics Review (and/or Screening)? • If Yes: have you described the progress of compliance with the relevant Ethics Review/Screening Requirements in the frame of the periodic/final project reports? Special Reminder: the progress of compliance with the Ethics Review/Screening Requirements should be described in the Period/Final Project Reports under the Section 3.2.2 *'Work Progress and Achievements'*		No
2. Please indicate whether your project involved any of the following issues (tick box):		
Research on Humans		
• Did the project involve children?		No

• Did the project involve patients?	No
• Did the project involve persons not able to give consent?	No
• Did the project involve adult healthy volunteers?	No
• Did the project involve Human genetic material?	No
• Did the project involve Human biological samples?	No
• Did the project involve Human data collection?	No
Research on Human embryo/foetus	
• Did the project involve Human Embryos?	No
• Did the project involve Human Foetal Tissue / Cells?	No
• Did the project involve Human Embryonic Stem Cells (hESCs)?	No
• Did the project on human Embryonic Stem Cells involve cells in culture?	No
• Did the project on human Embryonic Stem Cells involve the derivation of cells from Embryos?	No
Privacy	
• Did the project involve processing of genetic information or personal data (e.g. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?	No
• Did the project involve tracking the location or observation of people?	No
Research on Animals	
• Did the project involve research on animals?	No
• Were those animals transgenic small laboratory animals?	No

• Were those animals transgenic farm animals?	No
• Were those animals cloned farm animals?	No
• Were those animals non-human primates?	No
Research Involving Developing Countries	
• Did the project involve the use of local resources (genetic, animal, plant etc.)?	No
• Was the project of benefit to local community (capacity building, access to healthcare, education etc)?	No
Dual Use	
• Research having direct military use	No
• Research having the potential for terrorist abuse	No

C	Workforce Statistics

3.   Workforce statistics for the project: Please indicate in the table below the number of people who worked on the project (on a headcount basis).

Type of Position	Number of Women	Number of Men
Scientific Coordinator	0	1
Work package leaders	1	8
Experienced researchers (i.e. PhD holders)	1	10
PhD Students	0	7
Engineers	2	29
Other	7	6

4. How many additional researchers (in companies and universities) were recruited specifically for this project?	5

Of which, indicate the number of men:	5

D Gender Aspects

5. **Did you carry out specific Gender Equality Actions under the project**?	○	Yes
	●	No

6.   Which of the following actions did you carry out and how effective were they?

	Not at all effective				Very effective
❑ Design and implement an equal opportunity policy	○	○	●	○	○
❑ Set targets to achieve a gender balance in the workforce	○	○	●	○	○
❑ Organise conferences and workshops on gender	○	○	●	○	○
❑ Actions to improve work-life balance	○	○	●	○	○

○ Other:

7.   Was there a gender dimension associated with the research content – i.e. wherever people were the focus of the research as, for example, consumers, users, patients or in trials, was the issue of gender considered and addressed?

○   Yes- please specify

●   No

E	Synergies with Science Education

8. **Did your project involve working with students and/or school pupils (e.g. open days, participation in science festivals and events, prizes/competitions or joint projects)?**

● Yes:

HHI had University students investigating with SVC and IPTV while making their Master's thesis.

○ No

9. **Did the project generate any science education material (e.g. kits, websites, explanatory booklets, DVDs)?**

○ Yes- please specify [   ]

● No

F	Interdisciplinarity

10. **Which disciplines (according to the Frascati Manual 2002) are involved in your project?**

● Main discipline:

Mathematics and computer sciences

● Associated discipline:

Electrical Engineering (communication engineering and systems)

○ Associated discipline:

G	Engaging with Civil society and policy makers		
11a	**Did your project engage with societal actors beyond the research community?** *(if 'No', go to Question 14)*	○ ●	Yes No
11b	**If yes, did you engage with citizens (citizens' panels / juries) or organised civil society (NGOs, patients' groups etc.)?** ○ No ○ Yes- in determining what research should be performed ○ Yes - in implementing the research ○ Yes, in communicating /disseminating / using the results of the project		
11c	**In doing so, did your project involve actors whose role is mainly to organise the dialogue with citizens and organised civil society (e.g. professional mediator; communication company, science museums)?**	○ ●	Yes No
12.	**Did you engage with government / public bodies or policy makers (including international organisations)** ● No ○ Yes- in framing the research agenda ○ Yes - in implementing the research agenda ○ Yes, in communicating /disseminating / using the results of the project		
13a	**Will the project generate outputs (expertise or scientific advice) which could be used by policy makers?** ○ Yes – as a **primary** objective (please indicate areas below- multiple answers possible)		

○   Yes – as a **secondary** objective (please indicate areas below - multiple answer possible)

●   No

13b If Yes, in which fields?

Agriculture	Energy	Human rights
Audiovisual and Media	Enlargement	Information Society
Budget	Enterprise	Institutional affairs
Competition	Environment	Internal Market
Consumers	External Relations	Justice, freedom and security
Culture	External Trade	Public Health
Customs	Fisheries and Maritime Affairs	Regional Policy
Development Economic and Monetary Affairs	Food Safety	Research and Innovation
Education, Training, Youth	Foreign and Security Policy	Space
Employment and Social Affairs	Fraud	Taxation
	Humanitarian aid	Transport

13c   If Yes, at which level?

○   Local / regional levels

○   National level

○   European level

○   International level

H	Use and dissemination
14. How many Articles were published / accepted for publication in peer-reviewed journals?	**10 published;** **1 in process;** **2-3 under work.**
To how many of these is open access[2] provided?	**All, on the OptiBand website.**
How many of these are published in open access journals?	**1**
How many of these are published in open repositories?	**All are available for download from the project's public website.**
To how many of these is open access not provided?	**None**
Please check all applicable reasons for not providing open access:	**N/A**
❑ publisher's licensing agreement would not permit publishing in a repository ❑ no suitable repository available ❑ no suitable open access journal available ❑ no funds available to publish in an open access journal ❑ lack of time and resources ❑ lack of information on open access ❑ other[3]: ……………	

15. How many new patent applications ('priority filings') have been made? *("Technologically unique": multiple applications for the same invention in different jurisdictions should be counted as just one application of grant).*		**0**
16. Indicate how many of the following Intellectual Property Rights were applied for (give number in each box).	Trademark	**0**
	Registered design	**0**
	Other	**0**
17. How many spin-off companies were created / are planned as a direct result of the project?		**0**
Indicate the approximate number of additional jobs in these companies:		
18. Please indicate whether your project has a potential impact on employment, in comparison with the situation before your project:		

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[2] *Open Access is defined as free of charge access for anyone via Internet.*

[3] *For instance: classification for security project.*

■ Increase in employment, or	■ In small & medium-sized enterprises
■ Safeguard employment, or	■ In large companies
❑ Decrease in employment,	❑ None of the above / not relevant to the project
❑ Difficult to estimate / not possible to quantify	

19. For your project partnership please estimate the employment effect resulting directly from your participation in Full Time Equivalent (*FTE = one person working fulltime for a year*) jobs: ■ Difficult to estimate / not possible to quantify	*Indicate figure:* **5**

I	**Media and Communication to the general public**

20. As part of the project, were any of the beneficiaries professionals in communication or media relations?

    ○ Yes   ● No

21. As part of the project, have any beneficiaries received professional media / communication training / advice to improve communication with the general public?

    ○ Yes   ● No

22 Which of the following have been used to communicate information about your project to the general public, or have resulted from your project?

■ Press Release	■ Coverage in specialist press
❑ Media briefing	■ Coverage in general (non-specialist) press
❑ TV coverage / report	❑ Coverage in national press
❑ Radio coverage / report	■ Coverage in international press
■ Brochures /posters / flyers	■ Website for the general public / internet
❑ DVD /Film /Multimedia	■ Event targeting general public (festival, conference, exhibition, science café)

23 In which languages are the information products for the general public produced?

❑ Language of the coordinator	■ English
❑ Other language(s)	