Project no. 288570

PARAPHRASE

Strategic Research Partnership (STREP)

PARALLEL PATTERNS FOR ADAPTIVE HETEROGENEOUS MULTICORE SYSTEMS

Initial Press Release

D8.1

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Executive Summary

The ParaPhrase project has been concurrently announced in Europe and in the USA. The “Initial Press Release” activity has included the following five media communications:

1. “Scottish universities secure €1.25 million funding boost for advanced computing research”, release on 30th September 2011 by the Press Office of the University of St Andrews in Scotland.

2. “University awarded €638,000 for advanced computing research”, released on 30th September 2011 by the Communications Officer of the Robert Gordon University in Scotland.

3. “Mellanox Technologies Joins Forces with Leading European Organizations to Advance Breakthroughs in the Programmability of Multi-core Architectures”, released on 30th September 2011 by Mellanox Technologies Israel and the USA.


5. “University of Torino secure €290,000 funding to study development tools for multi-core and many-core platforms”, released on 28th October 2011 by University of Torino in Italy.

Covering both local and international publications, these four communications have been welcomed by news sites and services, and we are aware of ten journalistic appearances—including mainstream media outlets such as BBC Radio and The Scotsman—as a direct result of their release.

Project-related news can be found on the ParaPhrase web site at:

http://paraphrase-ict.eu/news
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Chapter 1

Introduction

Work package 8 covers the dissemination, exploitation, IPR management and public awareness activities of the ParaPhrase project. The main objectives are:

- to reach out to academics, programmers, ICT practitioners, industrial stakeholders, and the general public;
- to exploit project results in research, teaching and commercial entities; and,
- to monitor and protect the Intellectual Property Rights of the ParaPhrase project.

In order to ensure the success of the project, business and marketing staff from the industrial beneficiaries are being involved in relevant exploitation activities.

The 8.1 task covers the release dissemination of the “Initial Press Release” which marks the beginning of the ParaPhrase. In order to maximise exposure, the initial press releases have been coordinately released by five academic and commercial ParaPhrase partners:

- University of St Andrews
- Robert Gordon University
- Mellanox Technologies
- Erlang Solutions
- University of Torino
Chapter 2

Press Releases

2.1 University of St Andrews

Title: Scottish universities secure €1.25 million funding boost for advanced computing research

Date: Friday 30 September 2011

Body: Researchers at the University of St Andrews and Robert Gordon University have been awarded €1.25 million as part of a European Commission-funded project to undertake world-leading research to improve the programmability and performance of modern parallel computing technologies.

The €3.5 million ParaPhrase Project, supported by the Seventh Framework Programme (FP7) for Research and Technological Development—the EU’s main instrument for funding research, will bring together expertise from academic institutions and industry specialists across five countries.

Commencing in October and set to run for 3 years, the project has allocated over €600,000 each to the University of St. Andrews’ School of Computer Science, which will be co-ordinating the project and Robert Gordon University’s Institute for Innovation, Design and Sustainability Research (IDEAS).

It will be led by academics, researchers and PhD students of parallel computing and computational science.

In the last three decades, computer microprocessor speeds have increased almost 4,000 times with the rapid growth of modern technology. Today, users are starting to hit long-predicted physical limits on the speed of a single processor. With the emergence and development of mobile technology including smartphones and iPads, computing experts around the world are increasingly battling to provide a solution to match the speed that modern society demands of its computer processors.

Professor Kevin Hammond from the School of Computer Science at the University of St Andrews, comments, “Traditional computer design has hit a dead-end. Future computers will need to have thousands or even millions
of cores and this represents an unprecedented challenge. The ParaPhrase Project will address this challenge, developing new ways of ‘thinking in parallel’ that will make it practical for normal software developers to harness the capabilities of new, advanced designs.

“The benefit to society is potentially enormous as computers become an essential part of modern-day infrastructure. These new designs will not only allow uses we can only imagine at the moment, such as household robots helping with daily chores, driverless vehicles which can improve road safety or provide low-cost rural transport, and household automation to improve the quality of life of the elderly, but will also dramatically reduce the cost and energy usage of computer devices.”

The ParaPhrase Project will look to exploit high performance computers effectively to support modern demands for computing power in business, industry, research and entertainment, optimising the coordination of processors working together ‘in parallel’ to obtain peak performance.

Dr Horacio González-Vélez, a Lecturer and Principal Investigator at RGU’s School of Computing, explains, “All contemporary devices and computers furnish one or more multi-core processors. While it’s great that you have a fast, multi-core processor in your iPad or smartphone, unless the applications on these technologies are able to take full advantage of the processors capabilities, users will not see any real improvement. Multiply this by the millions of devices in the world, and you will appreciate the overwhelming size of the challenge at hand.”

“In order to programme future computer systems to maximise their functionality, we must produce software now that is easy to write and still allows any current and future hardware to be used effectively.”

As well as benefits to mobile technology and multi-core PCs, the research has substantial implications for computing servers in industry, eventually enabling more efficient renewable energy production, faster video streaming, nimbler 3D-image modelling, and improved industrial production systems. The project involves six academic institutions including St Andrews University, Robert Gordon University, the University of Stuttgart in Germany, Queens’ University Belfast, and the Universities of Torino and Pisa in Italy. Experts from industrial partners include Erlang Solutions Ltd in the UK, Mellanox Ltd in Israel and the Software Competence Centre in Austria.

For more information on the project, please visit http://paraphrase-ict.eu/.
2.2 Robert Gordon University

**Title:** Researchers at Robert Gordon University’s Institute for Innovation, Design and Sustainability Research (IDEAS) have been awarded €638,000 as part of a European Commission-funded project to undertake world-leading research to improve the performance of modern computing technology.

**Date:** Friday 30 September 2011

**Body:** The €3.5 million *ParaPhrase* Project, supported by the Seventh Framework Programme (FP7) for Research and Technological Development - the EU’s main instrument for funding research - will bring together expertise from academic institutions and industry specialists across five countries, including St Andrews University, who will co-ordinate the project.

Set to be launched at an event in Italy next week and due to run for 3 years, the project at RGU will involve academics, researchers and PhD students of parallel computing and computational science at the School of Computing and IDEAS Research Institute. In the last three decades, computer microprocessor speeds have increased almost 4000 times with the rapid growth of modern technology. Today, users are starting to hit long-predicted physical limits on the speed of a single processor. With the emergence and development of mobile technology including smartphones and iPads, computing experts around the world are now battling to provide a software solution to match the speed that modern society demands in its computer processors.

The *ParaPhrase* Project will look to exploit high performance computers effectively to support modern demands for computing power in business, and industry, maximising the speed of processors working together ‘in parallel’ to give peak performance.

Dr Horacio González-Vélez, a lecturer at the School of Computing and Principal Investigator of the project at RGU, explains:

“...All contemporary devices and computers furnish one or more multi-core
processors. While it’s great that you have a fast, multi-core processor in your iPad or smartphone, unless the applications on these technologies are able to take full advantage of the processor’s capabilities, users will not see any real improvement. Multiply this by the millions of devices in the world, and you will appreciate the overwhelming size of the challenge at hand.”

“In order to efficiently programme computer systems to maximise their potential functions, we must produce software now that is easy to write and still allows current and future hardware to be used effectively.”

As well as immediate benefits to mobile technology, multi-core servers and PCs, the research has long-term implications for industry, in more efficient renewable energy production, faster video streaming, nimbler 3D-image modelling, and improved industrial production systems.

Dr González–Vélez adds:

Certainly, the challenges and difficulties of parallel programming concern computing specialists and experts, but finding out why these exist and what we can do to solve them has practical applications in everyday technology for individuals, businesses and industry.”

Professor Susan Craw, Director of IDEAS, adds:

I’m delighted that RGU will be involved in the ParaPhrase Project, which could position Europe at the cutting-edge of parallel computing, helping to address the multi-core challenge.”

The project involves six academic institutions including St Andrews University, Robert Gordon University, the University of Stuttgart in Germany, Queens’ University Belfast, and the Universities of Torino and Pisa in Italy. Experts from industrial partners include Erlang Solutions Ltd in the UK, Mellanox Ltd in Israel and the Software Competence Centre in Austria.

For more information on the project, please visit the ParaPhrase Project.

Snapshot from the original release at:

http://www.rgu.ac.uk/news/robert-gordon-university-awarded-638-000-funding-boost-for-advanced-computing-research
2.3 Mellanox Technologies

Title: Mellanox Technologies Joins Forces with Leading European Organizations to Advance Breakthroughs in the Programmability of Multi-core Architectures

Sub-Title: New €3.5 Million ParaPhrase Project Aims to Improve the Speed and Performance of Modern Parallel Computing Technology for High Performance Computing

Date: Friday 30 September 2011

Body: SUNNYVALE, CA and YOKNEAM, ISRAEL – September 30, 2011 – Mellanox Technologies, Ltd. (NASDAQ: MLNX; TASE: MLNX), a leading supplier of high-performance, end-to-end connectivity solutions for data center servers and storage systems, today announced it has partnered with leading European organizations in academia and industry in a new joint ParaPhrase Project titled ‘Parallel Patterns for Adaptive Heterogeneous Multi-core Systems’. The world-leading €3.5 million research project, funded by the European Commission, aims to improve the speed and performance of modern parallel computing technology by achieving breakthroughs in the programmability of multi-core architectures across the entire computing spectrum for high-performance computing, embedded and general-purpose.

After three decades, during which computer microprocessor speeds have increased almost 4000 times with the rapid growth of modern technology, users are starting to hit long-predicted physical limits on the speed of a single processor. With the emergence and development of mobile technology with multi-core processors including smartphones and iPads, computing experts around the world are increasingly battling to provide a solution to match the speed that modern society demands of its computer processors.

The ParaPhrase Project addresses a key technical problem currently limiting the use of integrated multi-core parallel systems by developing and deploying new high-level design patterns for parallel applications that allow alternative implementations which can be applied to the available hardware. Multi-core CPU and GPU systems offer the potential for both cheap, scalable high-performance computing and for significant reductions in power consumption. In order to achieve this, it is essential to leverage new heterogeneous architectures (comprising collections of multiple processing elements) by means of adaptable parallel computational patterns.

“A key technical problem limiting the use of integrated multi-core parallel systems is maintaining portable performance across different CPU/GPU combinations,” says Dr Horacio González-Vélez, lecturer from Robert Gordon University’s School of Computing in Aberdeen and principal investigator in the ParaPhrase project. “The core of the problem is in providing
high-level programming support with a flexible implementation model. If developers are unable to design software to fully exploit the resources provided by multiple cores, then they will ultimately reach an insurmountable performance ceiling. We contend that the effective use of parallel patterns on virtual hardware instances can shed light on this challenge."

Professor Kevin Hammond at the School of Computer Science at St Andrew’s University and ParaPhrase research project coordinator comments, “The benefits that could come as a result of the ParaPhrase research findings could help position Europe at the cutting edge of parallel computing and enable a state-of-the-art software programming paradigm for multi-core processors, helping to resolve a huge problem facing all computing technology users from individuals to major industry players.”

The ParaPhrase Project is supported by the Seventh Framework Programme (FP7) for Research and Technological Development, the EU’s main instrument for funding research. The research project garners expertise from six academic institutions and three industry specialists across five countries. The six academic institutions are St Andrews University, Robert Gordon University, University of Stuttgart in Germany, Queens University Belfast, and the Universities of Torino and Pisa in Italy. Experts from industrial partners include Mellanox Ltd in Israel, Erlang Solutions Ltd in the UK and the Software Competence Centre in Austria.

The project will commence in October 2011 and is scheduled for three years. For more information, please visit the project website: http://paraphrase-ict.eu/.

About Mellanox

Mellanox Technologies (NASDAQ: MLNX, TASE: MLNX) is a leading supplier of end-to-end InfiniBand and Ethernet connectivity solutions and services for servers and storage. Mellanox products optimize data center performance and deliver industry-leading bandwidth, scalability, power conservation and cost-effectiveness while converging multiple legacy network technologies into one future-proof architecture. The company offers innovative solutions that address a wide range of markets including HPC, enterprise, mega warehouse data centers, cloud computing, Internet and Web 2.0.
2.4 Erlang Solutions

**Title:** Erlang Solutions Awarded Grants in Excess of €800,000 for Multi-core Computing Research

**Sub-Title:** Research will help develop and shape the multi-core frameworks of the future

**Date:** Tuesday 26 July 2011

**Body:** London, 26th July 2011 - Erlang Solutions Limited has been awarded two grants, totalling €800,000, for research into the use of the Erlang programming language in multi-core computing. The grants are funded by the Seventh Framework Programme (FP7) for Research and Technological Development, the EU’s main instrument for funding research in Europe and are part of €6.9 million granted to two consortiums whose partners consist of European companies and universities. Under its Cooperation Programme, research support is provided to international cooperation projects across the European Union and beyond.

Erlang Solutions and its partners submitted proposals for the **ParaPhrase** and RELEASE projects in answer to FP7’s call for proposals on the subject of “Alternative Paths to Components and Systems” in Computing, in its Information and Communication Technologies (ICT) research category. The objective is to achieve breakthroughs in the transition to multi-core architectures across the whole computing spectrum—embedded, general-purpose and high-performance computing. This transition affects the underlying hardware, the system software (compilers, tools, OS, etc.) and the programming
paradigms.

Titled “Parallel Patterns for Adaptive Heterogeneous Multi-core Systems”, the ParaPhrase project addresses a key technical problem that currently limits the use of integrated multi-core parallel systems, despite its potential for both cheap, scalable high-performance computing and for significant reductions in power consumption. The problem is to maintain portable performance across multiple different CPU/GPU combinations. The ParaPhrase project will address this by developing and deploying new high-level design patterns for parallel applications that allow alternative parallel implementations and that can be initially mapped and subsequently re-mapped to the available hardware.

Kevin Hammond, Professor of Computer Science at the University of St Andrews and the ParaPhrase project coordinator said: “It’s great to be working with Erlang Solutions and its outstanding team of multi-core experts. The company is a leading commercial provider of Erlang-related research, and will expose our research results to tens of thousands of Erlang programmers around the world. Multi-core is a key area where functional language technologies can make a major impact on the real world. ParaPhrase will take a new pattern-based approach, using advanced software refactoring to build parallel programs from sets of software components that will help programmers ‘think in parallel’.”

For the RELEASE project, research will be conducted into “A High-level Paradigm for Reliable Large-scale Server Software”. The aim is to scale the radical concurrency-oriented programming paradigm to build reliable general-purpose software, such as server-based systems, on massively parallel machines. Concurrency-oriented programming is distinctive, as it is built on highly-scalable lightweight processes which ‘share nothing’, in contrast to a conventional language that must typically use operating system processes.

Erlang Solutions will lead on designing and engineering the scalable infrastructure and leverage its events expertise to lead on dissemination and exploitation through conferences, publications, training and through the Erlang opensource community. As both a developer of Erlang applications and a training and consultancy provider, it is in a unique position to carry out detailed evaluation of the work, embed its findings in its own development lifecycle and then provide training and promote appropriate techniques to its clients.

“We are delighted to have the opportunity to work on scaling the radical Erlang programming language to build reliable general-purpose software on massively parallel machines,” said Philip W. Trinder, Professor in Computer Science in the School of Mathematics and Computer Science, Heriot-Watt University and RELEASE project coordinator. “We believe we have assembled a world-class team from across Europe. As the language is a trend-setter for reliable distributed computing we expect that RELEASE will have
a global impact far beyond the burgeoning Erlang community.”

“These two grants show Erlang Solutions’ commitment to stay at the forefront of Erlang based research, helping Erlang become a winner in the multi-core and cloud computing revolution,” commented Francesco Cesarini, Founder and Technical Director at Erlang Solutions. “We are delighted to work with our world class academic and industrial partners. With their support we have been given the opportunity to develop the multi-core frameworks of the future.”

-ENDS-

About Erlang Solutions Ltd
Erlang Solutions specialises in supporting businesses with the creation, integration, delivery and lifetime support of products and services based on the Erlang programming language, from small developers to Fortune 500 corporations. Erlang Solutions is the only company of its kind totally focused on Erlang and the Erlang community, offering industry-leading research, development, training and worldwide support for businesses using Erlang. Erlang Solutions helps its customers to realise the potential of Erlang-based solutions, with all the inherent benefits of the low lifetime cost, extreme reliability and scalability offered by Erlang. Erlang Solutions has offices in London, Stockholm and Krakow. For further information please visit www.erlang-solutions.com

About Erlang, the programming language
Erlang is a programming language developed specifically for systems requiring extremely high levels of reliability and scalability. Erlang is ideally suited to use in systems with a high degree of concurrency, such as telecoms, banking, automotive, instant messaging and social networks. Erlang Solutions was founded in 1998 by several of the original creators of the Erlang language. Erlang is an Open Source language with an active and growing global community of developers and programmers.

For more information please contact: Erlang Solutions Vicki Fertnig / Ryan Waters +44 207 751 4444 erlang@miliberty.com

Snapshot from the original release at:
2.5 University of Torino

Title: University of Torino secure €290,000 funding to study development tools for multi-core and many-core platforms

Title in Italian: Approvato il finanziamento europeo di 290,000 euro per lo studio di strumenti di programmazione per piattaforme multi-core e many-core

Date: Friday 28 October 2011

Body: The €3.5 million “ParaPhrase” project, supported by the Seventh Framework Programme (FP7) for Research and Technological Development – the EU’s main instrument for funding research – will bring together expertise from academic institutions and industry specialists across five countries, including the University of Torino (UNITO). Launched at an event at university of Torino on 4 October 2011 and due to run for 3 years, the project has allocated over €290,000 and will involve academics, researchers and PhD students of parallel computing and computational science at Computer Science department. Dr. Marco Aldinucci, researcher at University of Torino, a principal investigator in ParaPhrase project is leading the Work Package on “Low-Level Virtualisation and Platform-Specific Deployment”.

The ParaPhrase project aims to improve the speed and performance of modern parallel computing technology by achieving breakthroughs in the programmability of multi-core and many-core architectures across the entire computing spectrum for high-performance computing, embedded and general-purpose. This ultimately aims to effectively support modern demands for computing power in business, and industry, maximizing the speed of processors working together ‘in parallel’ to give peak performance.

For more information on the project, please visit http://paraphrase-ict.eu/


Il progetto, della durata di tre anni, che è stato inaugurato a Torino all’inizio di Ottobre 2011, ha portato al dipartimento di Informatica dell’università di Torino un finanziamento di oltre 290,000 Euro finalizzato a supportare professori, ricercatori e studenti di dottorato nell’attività di ricerca in ambito di calcolo parallelo ad alte prestazioni. Il Dott. Marco Aldinucci, ricercatore dell’università di Torino, coordina l’attività di ricerca all’università di Torino nel progetto e guida le attività in ambito di virtualizzazione e compilazione dell’intero progetto.
Il progettoParaPhrase ha come obiettivo ultimo il miglioramento delle prestazioni e della portabilità del software su processori multi-core e many-core (es. GPGPU) mediante l’evoluzione della tecnologia degli strumenti di progettazione e di sviluppo delle applicazioni. I processori multi-core e many-core, che sono i componenti fondamentali di ogni dispositivo di calcolo elettronico moderno (dal supercalcolatore allo smartphone) sono correntemente utilizzati con bassa o bassissima efficienza dal software applicativo. Il progetto mira a colmare la crescente domanda di potenza di calcolo richiesta dalle applicazioni industriali e scientifiche mediante la definizione di metodologie atte a supportare lo sviluppo di applicazioni scalabili e portabili su piattaforme parallele multi e many-core.
Ulteriori informazioni: http://paraphrase-ict.eu/

Original release at Computer Science website:

| Title | Approvato il finanziamento europeo di 290,000 euro per lo studio di strumenti di programmazione per piattaforme multi-core e many-core. |
| Date | October 28 2011 at 00:00am |

Re-issue at University of Torino main website (English)

| Title | "ParaPhrase" project |
| Date | October 31 2011 at 11:00am |

Re-issue at University of Torino main website (Italian)

| Title | Progetto "ParaPhrase" del Dipartimento di Informatica |
| URL | http://www.unito.it/unitoWAR/page/istituzionale/comunicazione_stampa_bea/allavvisi4?path=%2FBEA+Repository%2F2774002 |
| Date | October 31 2011 at 11:00am |

Re-issue on Facebook:

| URL | http://www.facebook.com/unito.it |
| Date | October 31 at 3:54pm |
Il progetto "ParalPhe", finanziato con 3.5 milioni di Euro dalla Comunità Europea nell'ambito del settimo programma quadro ICT, realizza l'esperienza accademica e industriale maturo in diversi anni della Comunità Europea e coinvolge direttamente l'università degli studi di Torino. Il progetto, della durata di tre anni, che è stato inaugurato a Torino all'8 di Ottobre 2011, ha portato al dipartimento di Informatica dell'Università di Torino un finanziamento di oltre 290,000 Euro finalizzato a supportare professionisti, ricerca e studenti di dottorato nell'attività di ricerca in ambito di calcolo parallelo e applicazioni. Il Dott. Marco Adinucci, ricercatore dell'Università di Torino, coordina l'attività di ricerca all'Università di Torino nel progetto e guida la attività in ambito di virtualizzazione e compilazione dell'intero progetto. Il progetto ParalPhe ha come obiettivo ulteriore il miglioramento delle prestazioni e della portabilità del software su processori multi-core e many-core (spe SGI/US) mediante l'evoluzione della tecnologia degli strumenti di progettazione e di sviluppo delle applicazioni. I processori multi-core e many-core, che sono i componenti fondamentali di ogni dispositivo di calcolo elettronico moderno (dal supercalcolatore allo smartphone) sono coerentemente utilizzati con basso e basse prestazioni del software applicativo. Il progetto mira a colmare la crescente domanda di potenza di calcolo richiesta dalle applicazioni industriali e scientifiche mediante la definizione di metodologie attive e supportare lo sviluppo di applicazioni scalabili e portabili su piattaforme parallele multi e many-core.

Ulteriori informazioni: http://paralphe-ict.eu/
Chapter 3

Media Coverage

Having been distributed through different media services in Europe and in the US, the initial four press releases have been directly covered in radio, online media, and printed newspapers.

3.1 Radio

1. After the first press communications on the ParaPhrase project, there was a radio interview featured in “Original 106” radio (Scotland) as part of The Lounge show on 3rd October 2011.
   http://www.originalfm.com/news?id=34195

2. The BBC’s Good Morning Scotland reporter Kevin Keane interviewed Kevin Hammond and Horacio González–Vélez during the ParaPhrase plenary meeting in Turin, Italy on 3rd October 2011. In effect the national broadcaster for Scotland, BBC Scotland is a constituent part of the British Broadcasting Corporation, the publicly-funded broadcaster of the United Kingdom.

3. After the University of Torino press communications on the ParaPhrase project, there was a radio interview to Dr. Marco Aldinucci featured in “110 webradio” radio as part of “Universotutti (4a stagione)” on 8th November 2011.
   http://www.110.unito.it/?pubblica=podcast&id_programma=702

3.2 Online

1. There was a special article on the project featured in the NewNet site on 30th Sep 2011. NewNet is part of the New Energy World Network, which comprises leaders of the cleantech, environment, renewable energy and
sustainability sectors.

2. The Aberdeen Grampian Chamber of Commerce (AGCC) published a headline article on the ParaPhrase project, immediately after the press release on Friday 30th September 2011. Such article was potentially read by more than 1,200 businesses with 90,000 employees in the private sector represented by the AGCC.
http://www.agcc.co.uk/robert-gordon-university-awarded-638000-funding-boost-for-advanced-computing-research/

3. Compute Scotland is a portal for computer and high technology communities in Scotland which covers major global developments. They featured a special article on the project on Saturday 1st October 2011.

http://www.efficientenergy.net/n/102386.htm

5. Power-Link ran the headline “New research to assist smart grid development” on 18/10/2011. Power-Link is a Belgian publication co-sponsor by Ghent University.
http://www.power-link.be/new-research-assist-smart-grid-development

6. Radio-Electronics.Com, a website for the radio and electronics engineering industries, included a dedicated article entitled “Erlang wins €800,000 for multi-core computing research”.

3.3 Newspapers

1. Under the headline “£1m research boost for universities”, the Scotsman highlighted in its printed and online editions that “Researchers at the University of St Andrews and Robert Gordon University in Aberdeen have been awarded funding of €1.25 million (£1.08m) as part of a European
Commission-funded study into computing technologies.” It is relevant to mention that The Scotsman is firmly established as a quality daily Scottish newspaper since 1817 with an audited circulation of 38,423 (August 2011).

http://thescotsman.scotsman.com/scitech/1m-research-boost-for-universities.6845649.jp

2. The Saint run the article “University awarded €1.25 million in research funding”. An independent newspaper written and run by students at the University of St Andrews, The Saint maintains complete editorial and financial independence.

Chapter 4

Conclusion

The 8.1 task “Initial Press Release” has been successfully completed with the issuing of four separate press releases, preceding the official 1/Oct/11 starting date of the ParaPhrase project.

In order to maximise the overall impact of the media campaign, two of the initial press releases have been published from the academia and two from the industry. The geographical reportage include nine European and international media outlets with a direct audience of thousands of people.

Project-related news can be found on the ParaPhrase web site at:

http://paraphrase-ict.eu/news