

47th FITCE Congress - True Convergence? Transformation of lives, services & networks



The 47th FITCE Congress took place in the Institute of Education, University of London, from 21st to 24th September 2008. All delegates once again enjoyed the convivial FITCE atmosphere of high quality presentations, stimulating discussions as well as excellent opportunities for networking and meeting old and new friends during the lunch and coffee breaks and at a number of evening events. The overall theme for this year's Congress was "Transformation: Next Stop... True Convergence?"

FITCE Forum

© 2009: The Federation of Telecommunications Engineers of the European Union, an Association of Belgium http://www.fitce.org *Editor:* Kevin D Fogarty E-mail: news@fitce.org

Editorial Board:

FITCE Marketing Group

The opinions expressed in this publication are those of the authors and are not the responsibility of FITCE. ISSN 1106-2975 This theme was immediately addressed in the opening session with two excellent and thought-provoking keynote speeches. Sir David Varney, who is the special adviser to the UK Prime Minister on Public Service Transformation spoke about the fact that citizens' time is not free, yet often the way public services are delivered assumes it to be so. His aim is to change public services so they more often meet the needs of people and businesses, rather than the needs of government. All of this means a major transformation of public services and systems the like of which has not been addressed since the beginning of the 20th century.

Mark Quartermaine, Managing Director, BT Public sector, also addressed the importance of designing systems from "the outside-to-in" so as to approach problems from the citizens' points of view and not from the technology aspects. He illustrated the transformation in people's behaviour by an anecdotal illustration of how people push a button in a lift. (pictured above right). The vast majority of people over 21 years of age will use their index finger as their dominant finger to push the button. Younger people on the other hand use their thumb as their dominant finger. This anthropological change (a true transformation of lives) has come about in recent years from the behaviour of young people in using their games-consoles and mobile phones.

December 2008

The Congress closed with a panel discussion on "Next Stop...true Convergence?" which was chaired by Prof. Izzat Darwazeh, chair of telecommunications engineering at University College London, in which several prominent figures in the ICT industry took part.

FITCE values and aims

- Keeping in touch with leading edge ICT developments.
- Ensuring that our members benefit from the experience acquired by other members in all ICT fields.
- Building strong cultural and business ties between European ICT professionals.
- Ensuring that Young Professionals are able to use FITCE as a valued resource in their career development

London Congress - Transformation 2008 -

As usual the FITCE Congress in London was not just any ordinary international technical conference. The fundamental Aims & Values of FITCE (as shown in the text box on page 1) were closely adhered to, and on this page here we have illustrated just some small snippets of several of these important aspects, which make a FITCE Congress unique and highly valuable to the broader aims of the important European ICT industry.

Prize winning papers and presenters

Once again FITCE demonstrated the importance it places both on the quality of the papers that are submitted and the skill of the presenters in the annual congress by awarding three prizes of \in 500 each to:

- The author of the best written paper (as chosen by the Technical Programme Committee)
- The best presenter in the Congress (chosen by the audience)
- The best young presenter in the Congress (chosen by the audience)

The prize for the best-written paper went to Peter Leonhardt of BT, UK. His paper was entitled "Appropriate Telecom Systems for the Provision of Internet Connectivity to Remote Schools in Least Developed Countries"



Peter Leonhardt being congratulated by the FITCE President Barry Reynolds.

The winner of the best presenter award was Francis Pereira of The Centre for Telecom Management, USA.

The award for the best young presenter went to Shahin Mesgar Zadeh of Delft University, The Netherlands.



Barry Reynolds presents the best young presenter award to Shahin Mesgar Zadeh.

International networking during the social and cultural programme.

Once again the FITCE Congress was not just about listening to and participating in business and technical aspects of ICT. The Congress hosts offered a varied and highly interesting cultural programme on each day, both for the partners and in the evenings for delegates and partners. Among the highlights of the partners' programme was a day exploring the beautiful Oxford region and the City of Oxford, famous the world over for its University and place in history.

That first evening closed with a reception at the Ofcom HQ building on the Thames riverside. This was a splendid opportunity for delegates and friends to meet over drinks and canapés and enjoy a splendid view of the London skyline by night.



This programme culminated with a wonderful gala dinner on the Tuesday night in the SAS Radisson hotel in Portman Square. The highly enjoyable evening included a dinner-dance, with splendid musical entertainment from the 'The Giraffes' and the awards presentations (see adjacent textbox).



Panel session on "Next Stop...true Convergence?"



On the last morning of the Congress a panel session addressed the central theme of the 2008 Congress. Prof. Izzat Darwazeh, chair of telecommunications engineering at University College London, chaired it (*pictured on the right in the photo above*). The other members of the panel were: Mick Reeve of Mixtel Ltd, UK, Felix Wunderer from Deutsche Telekom, Germany (*left and centre in the photo above*), Philip Hargrave of the Digital Telecommunications KTN, UK and Tim Hubbard from BT, UK.

Issues as diverse as how to migrate all existing services on transformed next generation platforms and what is the business model for providing Next Generation Access Networks were considered. In the UK the BBC's iPlayer service, which gives access to archived programmes at high quality over broadband connections, is leading to very high traffic on the Internet. The question raised is should the information providers pay something to the infrastructure providers in order to pay the additional costs of carrying this traffic? Followup questions to the panel relating to this earlier discussion brought up the difficult issue of who will pay for super-fast broadband access. Consumers will expect to pay more or less the same prices for superfast broadband as they are paying for existing ADSL type services, and of course the subscription charges for these services are dropping all the time. For fixed network operators this raises the difficult question of how to justify or find the finance to invest in fibre rich networks to provide these super-fast broadband services.

News from FITCE – Italy

The role of ICT in the protection of critical infrastructures

Andrea Penza, Italy

On September 25th the AICT, the FITCE Italy National Association, the AIIC, the Italian Association for critical infrastructure expertise and the AEE, the Italian Association for Energy organised a one-day event to discuss ICT applications applied to the Italian main infrastructures.

In recent years, digital and informatics technologies have enlarged their field of application from the industries directly involved in ICT to in a very short time other sectors, like Public Administration, Health, Power & Energy. If these sectors are not properly working, it could cause very big damage to the whole community.

During the meeting, held in the First University 'La Sapienza' in Rome, benefits and damages coming from the ever wider diffusion of ICT technologies in the vital infrastructures in Italy, were deeply analysed and discussed with most of the relevant stakeholders.

After the welcome coming from the AICT President Michele Morganti, the General Director of Civil Protection Department, Mrs. Luisa Franchina, spoke about the European Directive on critical infrastructure protection and, in particular, the approach of such a directive for 2008 which is focused on three main elements: ICE (European Critical infrastructure), PSO (Operator Security Plan) and interworking between the three main sectors involved, Electricity and Gas, Transport and ICT.

An influential member of European Commission, Mr. Andrea Glorioso, spoke about the activities of the European Commission in the area of digital and computerized critical infrastructure protection. He introduced the European approach to security of the networks and of information, making a list of different Competence Centres and the relative directives, which have been issued for 2008. Moreover he outlined the importance of the coordination role carried out by the European Commission and the important need of an inter-sector cooperation and inter-government action of all the interested countries, EU member state or not.

During the first roundtable entitled: "How Italy is collocated in the Critical Infrastructure protection landscape and the role of ICT", the following considerations were made.

Mr. Dario De Marchi of CNIPA, the centre of Network Information for Public Safety, outlined how the different companies, which are represented within the Organization, are shared by the same need to protect critical infrastructures, especially because of the lost revenues caused by system interruptions and the costs to recover the damages.

Mr. Umberto Babuscio, coming from RAI, the main public TV Operator in Italy, described the need for a radio & TV company like RAI. There is a very complex infrastructure, which is composed of a transmission network and diffusion network.

Mr. Giovanni Barontini, director of Finmeccanica Group outlined the need to distinguish between two different intervention fields: the physical protection (with network protection goals) and the logical and communication protection, with a vision oriented to an open and interworking IT infrastructure.

Mr. Carlo Flingeri, coming from Telecom Italia, described the Security Operative Centre and the Control Room where more than 80 people are engaged in security aspects. In particular the work on the development of the Safe Software Code, the recovery of the Data Centres, the usage of the Phoenix transport network (with intelligent GMPLS nodes able to isolate failures) and the development of systems for alarm handling like the sensors network.

In a panel session on 'Telecommunications' chaired by Prof. Guido Vannucchi, from AICT, he described that due to the large penetration and diffusion of informatics, the TLC networks increased the intrinsic danger for possible interruptions and failures either internally to the system (HW and SW failures as 'domino' effects) or for external reasons (natural disasters, hackers and informatics terrorism). The ICT is a basis for the systems intrinsic stability, but it is especially a fundamental sector for the critical infrastructure control (such as the National Energy System) even if it risks being a possible attack vehicle. With the introduction of NGN, the information system (voice, data, video) will be based on a IP model. With these characteristics the system globally could increase the global vulnerability with potentially even greater damages due to the exponential increase of services.

Mr Roberto Micoli, from Cisco, stated that in an ICT system, the elements which are more liable to Denial of Service attacks are the Data Centres and access networks, which have to be protected with multilevel solutions with functional separation of the physical elements from the logical ones. The modern IP networks, if properly used with their adequate intelligence and resilience, can act also as a very powerful distributed protection instrument. The new generation Data Centres with DPI (Deep Packet Inspection) are much more secure.

(Continued on page 6)

During the London Congress session entitled "Transforming Lives – improving the quality of Life", on 22 September 2008, Millie Banerjee, non-executive director of Ofcom (the UK's regulatory body for broadcasting, telecommunications and wireless communications sectors), delivered a fascinating keynote address.

CHANGES IN THE REGULATORY ENVIRONMENT

Keynote address by Millie Banerjee non-executive director of Ofcom, UK



INTRODUCTION

The title of this conference is fitting, because communications industries have truly transformed our day-to-day lives in the last decade. The revolution in digital services has happened faster than many of us predicted and the pace continues to grow.

- In the UK, communications industry revenue grew by 4% in 2007 to €65bn. It will be interesting if that growth can be sustained in the face of the economic downturn.
- Almost 90% of the population today have digital television.
- 58% of homes have BB with the average blended headline speed now at 5.9 Mbit/s
- Mobile telephony now accounts for 40% of the total time spent using telecoms services, up from 25% in 2002

BT and Virgin have now both announced investment in super-fast broadband networks, marking the start of the next generation of broadband a reality.

So, these are exciting times. Against that backdrop, I want to focus my remarks today on the importance of the regulatory framework in helping to achieve that success, and to consider some of the key regulatory issues that face us as we seek to continue to build on that success. I want to do so focusing on four key areas for this audience:

- The experience of functional separation in the UK.
- The current debate around the European Framework.
- Our recent announcement of a Mobile Sector Assessment in the UK.
- Wider questions around convergence.

FUNCTIONAL SEPARATION IN THE UK

Let me start with our experience of functional separation in the UK. Our approach to functional separation in the UK is now well documented, but worth briefly reiterating:

- Firstly identifying the enduring economic bottlenecks in BT's network, focused regulation hard in those areas, but withdrew elsewhere.
- Secondly creating a wholesale pricing framework that encourages investment – and competition – at the deepest possible infrastructure level, with LLU in broadband and voice and in key narrowband products such as WLR.
- Thirdly, operational separation, coupled with equivalence of input – same product, same price, same performance – on key wholesale products, to remove the incentives for non-price discrimination between BT's natural monopoly assets and the Group's downstream businesses.

Although only two and a half years in, functional separation in the UK has already proved to be a success. It has meant that:

- Regulatory certainty to both incumbents and altnets has been provided.
- Where in 2005 there were 100,000 unbundlers, today there are more than 4 million.
- The number of premises with access to unbundled exchanges has risen to over 82%
- By June of this year almost half of unbundled exchanges had four or more providers.

At the same time, BT has continued its investment in upgrading its core network to an all-IP NGN by 2012. In capex terms, BT is investing more in fixed wireline than any of its major European competitors. Furthermore BT has announced a £1.5 billion initial investment plan for FTTC, quashing the idea that functional separation would delay next generation investment. But challenges remain on how to serve the whole of the UK.

THE EUROPEAN FRAMEWORK

Of course, functional separation is also one of the questions being considered as part of the proposed reform of the European Framework. There are many other questions, and significant progress has been achieved over the last year of negotiations. In particular, in relation to the establishment of a new European Agency, where we are pleased that the original proposals for a super regulator now look to have been rejected, recognising the real concerns they raised in relation to political independence and efficacy. We continue to support the strengthening of the advisory function currently performed by the ERG, fully independent from governments and EU institutions. Equally, it is now clear that there is little or no support for an unconstrained Commission veto on remedies. That must be right. National bodies are still best placed to take decisions in relation to their own markets. We have also seen how the rights of communications users have been enhanced and NRAs given greater enforcement powers. However, real concerns remain in relation to spectrum.

So firstly, we continue to believe that the new Framework must embrace technological and service neutrality at the heart of its spectrum policy. Secondly, we need to recognise the potential for disruption at a national level that recent proposals for further harmonisation at a European level could bring.

MOBILE SECTOR ASSESSMENT

It is possible for national regulators and European agencies to act together to address problems effectively, as shown by the action taken on mobile roaming charges over the last few years. In fact the mobile sector is on the cusp of some major changes.

More than half the money we spend on telecommunications today is spent on mobile calls, 99 billion minutes and 60 billion texts in the UK alone. And whilst voice and text is healthy but slowing, mobile broadband is rocketing:

- The number of 3G connections in the UK is now around 12.5 million
- 2008 will be remembered as the "year of the dongle" with 6% of adults now using mobile broadband.

And as we approach that elbow of change, it is the right time for Ofcom to consider the direction of the market in our Mobile Sector Assessment, announced at the end of last month. Of course, spectrum availability is a crucial part of this. Ofcom has Europe's largest programme of spectrum release planned for the next two years and we will remain firmly on the side of innovator and consumer. But we also need to ask whether the mobile industry has a consumer challenge. Whilst the majority of us are very happy with our mobiles, it is an interesting fact that mobiles are second only to used cars in generating user complaints to the Consumer Direct helpline. And at a more fundamental level, we need to ask whether it is now time to reform mobile termination charges further than the price cap termination rates we currently apply.

WIDER QUESTIONS AROUND CONVERGENCE

And for all of us there are the wider questions around convergence. Let me finish by identifying just three critical questions: -

- Firstly, as wireless services become increasingly important, does our regulation of spectrum need to adapt to assist and facilitate that change?
- Secondly, as barriers to entry reduce and competitive pressures on traditional suppliers increase, how do we ensure that necessary large-scale investment continues in networks and infrastructure?
- Thirdly, in a world of increased service and technological complexity, how do we ensure that consumers are both empowered and protected?

The current regulatory settlement in the (UK) Communications Act has been a remarkable success- indeed it is surprising just how effective it remains given the change we have seen even since its implementation.

But it is also clear that legislative change is now on the horizon. And what that change is needed will require some careful analysis and debate from all of us here today over the coming months.

Millie Banerjee CBE has been a Non-Executive Member of Ofcom since 2003. She is also Chair of Ofcom's Remuneration Committee and a Member of Ofcom's Content Board and Nominations Committee. She is also the Chair of Postwatch, the consumer body for the Postal sector.

Previously she spent 25 years with BT, culminating at Director level in BT Products and Services Division, followed by Senior Vice President for ICO Global Communications. She has been a member of the Strategy Board of the Cabinet Office and has held several non-executive appointments including the Strategic Rail Authority, the Sector Skills Development Agency, Channel 4 TV and the Prisons Board.

Millie has also been a Board Member of Focus, a member of the governing body of South Bank University and a Commissioner for Judicial Appointments, the Chair of Carnegie UK Trust and a Member of the Advisory Board of Tanaka Imperial College Business School.

International Newsletter June 2008

Under the official name "T-Mobile G1" the Austria first Google mobile phone will come to Austria in the first half of 2009, says company speaker Katrin Scharl of T-Mobile Austria. Prices or rates are not known at the moment. Source: telekom-presse

ltaly Telecom Italia has reached an agreement with unions to make 5,000 workers redundant by 2010. The company will offer a severance package equal to 90% of an employee's regular monthly pay, Telecompaper reports. The layoffs come as the telco seeks to cut costs as it works to reduce its €37 billion debt; the planned redundancies will save around €300 million a year Telecom Italia says, though there will be a €287 million one-off restructuring charge. Source: TeleGeography

Netherlands Dutch telecommunication multiservices provider UNET has selected Nortel Networks to supply it with an ultra high-speed Internet system for homes and businesses across the Netherlands using a new Nortel Ethernet Access solution. UNET, a key player in the next generation IP networking and broadband service sector, focuses its efforts on the B2B and wholesale markets in the Netherlands. The company will use Nortel's Ethernet Access solution, which uses Wave Division Multiplexing Passive Optical Network (WDM-PON) architecture, to solve the issue of bottlenecks in the last-mile by using the existing optical backbone and enabling multiple wavelengths to be carried over the existing optical fibre. UNET aims to deliver advanced Ethernet services for triple- or multi-play business customers and services for broadcast media and security such as camera and sound recording. UNET plans a phased rollout of next generation services beginning in 2009.

Bosnia & Herzegovina

As the protracted privatisation process of state-owned telco BH Telecom continues, the operator's value has plunged this year, Limun.hr is reporting. Issues appointing a supervisory board for the company, coupled with the current global financial crisis, have seen the operator's share value drop drastically, with the current market value calculated at BAM1.2 billion (USD839 million); by comparison the value a year ago the operator was valued at BAM4 billion. The government of the Federation of Bosnia and Herzegovina (FBiH) has reiterated however that it intends to continue with plans to privatise the operator, along with fellow state-owned telco HT Mostar. Source: TeleGeography

Hungary

Hungary's largest telecoms company Magyar Telekom (MTel) announced plans to invest HUF 40 billion (USD 245 million) in next generation fibre and cable networks to deliver faster broadband access to customers by 2013. In a filing with the Budapest stock exchange the telco said: 'Magyar Telekom plans to spend a total capex of HUF 40 billion on its new generation access coverage rollout between 2009 and 2013.' By that date MTel plans to have rolled out fibre-to-the home (FTTH) networks covering 780,000 households across the country, as well as upgrading its hybrid-fibre-coax (HFC) network, which currently covers 380,000 households, with EuroDOCSIS 3.0 technology. 'The new corporate structure with its streamlined and integrated operations has laid down the foundations to offer high-quality bundled services both to our residential and business customers under the brands T-Home, T-Mobile and T-Systems,' MTel said in its statement.

Source: TeleGeograph

The role of ICT in the protection of critical infrastructures (continued from page 3)

Mr. Andrea Penza, from Ericsson and AICT, outlined that the ICT global sector determines and influences not only a large part of our jobs but also our private lives. The IP network, which has been built mainly with 'best effort' criteria, is still a very critical infrastructure and it will continue to be critical as long as the consumer needs to transmit personal data. He believed it is really necessary to improve the redundancy and networking aspects of the networks within the European standardization bodies. In special events such as natural disasters, Ericsson built and offered mobile networks to be positioned on moving cars and also specialized teams to help speedup the activity of Civil Protection teams. In the future it will be absolutely necessary to build a 'sustainability site model'. In Italy at present there are about 50,000 sites nationally distributed with the opportunity to activate a continuous monitoring activity across the whole country. The sustainable site, on which Ericsson has been working for some time, is mainly devoted to the strategic need to save energy, but also takes the opportunity to introduce new green technologies to increment the security and the reliability of all the critical infrastructures for the development and the improvement of human life.

In conclusion, all the operators showed a full awareness of how big the social and economic impact is in relation to the infrastructures to be handled. Moreover there is a growing perception of the fact that the threats against these systems have increased. These threats are due not only to some structured weaknesses due to the

geological and geographic peculiarity of Italy but also to a political/ architectural evolution which was not always coherent with long term goals.

The industrial world is fully engaged in addressing security aspects, which will assume an increased weight and a specific identification in 'service continuity'.

For the future everyone hopes that the implementation of the new European directive will be an opportunity for serious political considerations on the security aspects of the infrastructures. There is a need to create a unique coordination which takes care of sector specific needs and all the networking between the sectors in order to globally handle all the security aspects impacting our future life.

ICT Transformation: Global InfoSociety realization in 2009?

- a FITCE Congress The Forum for European ICT Professionals The 48th FITCE Congress Diplomat Hotel Prague, 3-5 September 2009

"Transformation is all around us, the convergence of the Communication, Computing and Broadcasting industries into a full ICT industry is transforming our lives by delivering new services and new applications leading to a Global InfoSociety"



Congress Themes:

.....transforming lives.....transforming services.....transforming networks

Keynote and invited speakers together with submitted papers and presentations will cover the following topics:

- Transformation of lives, services and networks in the Czech Republic
- The reality of the Global Info Society
- Telco 2.0 and Web 2.0 from infrastructure to services
- User friendly unified communication
- Information security and regulatory legal aspects reflecting the Czech EU 2009 presidency
- Effective support of business processes and new business models
- Customer tailored communication solutions

We invite you to join us and to participate in this 48th European FITCE Congress in Prague, 2009

- By attending the Congress, joining in the lively dialogues, and networking with European colleagues
- By submitting and presenting papers (see "Call for Papers" details overleaf)
- By participating in the social events in the evenings

This unique event should not be missed by ICT professionals in order to get answers and visions on the transformation happening in society due to ICT developments and the transformation of the communication industry.

www.fitce2009.org

ICT Transformation: Global InfoSociety realization in 2009?

The 48th FITCE Congress Diplomat Hotel Prague, 3-5 September 2009

CALL FOR PAPERS

Abstracts of proposed papers are now invited for the 48th European congress of FITCE. Submissions are welcome on any subject related to the congress themes - transforming lives, services and networks - and a non-exhaustive list of suggested areas is shown below.



Please keep in mind that submissions that look at the applications and implications of technology and technology change are more likely to be selected than those that are overly technical.

Submissions should contain:

- An abstract of 500 words (in English).
- A brief biography of the author(s).
- Full contact details (e-mail, telephone, and postal address).

The papers will be selected on relevance and originality of content.

For submission of abstracts and further details see: http://www.fitce2009.org

www.fitce2009.0rg

Deadlines:

- Submission of abstracts via web portal by 16th February 2009.
- Authors will be advised of the outcome of the paper selection not later than 1st April 2009.
- The full text of the selected papers (maximum 6 x A4 in English including illustrations/pictures) is required not later than 31st May 2009.

Prizes of €500 will be awarded at the Congress for:

- Best Paper
- Best Presenter
- Best Young Presenter one of the central aims of FITCE is to support young ICT professionals in their career development; a "Young Presenter" is one under 32 years of age on 3rd September 2009.