

## 46<sup>th</sup> FITCE Congress in Warsaw – A Great Success



The 46<sup>th</sup> FITCE Congress took place in the Marriott Hotel in the centre of Warsaw from 30<sup>th</sup> August to 1<sup>st</sup> September 2007. This was the first FITCE Congress to take place in a Central & Eastern European Country and it exceeded all expectations. The relatively

new FITCE association of Poland and the Association of Telecommunication Engineers of Poland (SIT), together with their co-sponsors performed a marvellous job in organising this prestigious event.

The overall theme for this year's Congress was "The Broadband Way to the Future", and it was jointly chaired by Mr. Wojciech Hałka, President of SIT and Prof Józef Modelski, chairman of the International Scientific Committee (ISC) for this year's congress. Some 200 delegates from around 17 different countries attended this wide-ranging and always fascinating and stimulating set of presentations. The Congress opened with a panel discussion on "The Broadband Future", in which several prominent figures in the Polish ICT industry argued their views as to whether mobile or fixed network solutions will prove to be the optimum way to the broadband future. Several innovations were introduced for this year's Congress. In addition to papers selected by the ISC, some sessions had additional invited keynote presentations. In the fascinating session entitled "FMC=Fixed

Mobile Competition", Dr. Roberto Saracco of Telecom Italia delivered a thought provoking paper on "Technology Evolution and Market Impact". We are very pleased that we were able to reproduce an abridged version of this paper in this issue of The Forum (see pages 4-5). A novel type of session, "Open session on green telecommunication and posters" was organised and chaired in a very animated way by Wolfgang Messow (FITCE Germany). *(more details of the Warsaw Congress are on p. 2)*

### FITCE Forum

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### 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

# Warsaw Congress – delivering FITCE Values & aims

As usual the FITCE Congress in Warsaw 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.



## Green Telecommunications - how can FITCE contribute to the Global warming debate?

The relationship between telecommunications, environmental and waste issues was the subject of a special discussion session on the Friday afternoon.



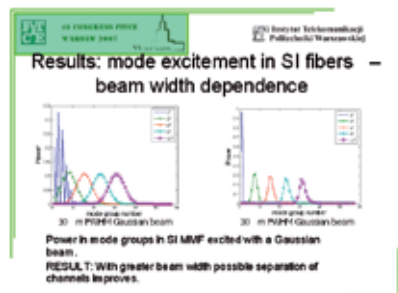
This session also included a number of "Poster" presentations on issues which ranged from the techno-economics of broadband using WIMAX technology to Photonics Reliability. This Poster concept was another innovation at the Warsaw Congress. *Wolfgang Messow*, from FITCE Germany, very ably moderated this combined session, which was intended to allow as much discussion and interaction with the audience as possible. (see photos). The seven speakers occupied different corners of the room and interested delegates were invited to meet with them and to circulate from group to group.



## The importance of Young Professionals



Once again the Congress demonstrated the importance FITCE places on the role of the Young professional in the ICT Industry. A special session was devoted to two wonderful presentations by a young Austrian (*Christian Eggenberger*) and a Pole (*Grzegorz Stepniak*). Christian's paper on "GOTU - The hitchhiker's guide to the brave new world" clearly demonstrated the fresh thinking and innovative ideas that young European ICT professionals are capable of. Grzegorz's presentation was on "Mode Group Diversity Multiplexing in Step Index and Graded Index Multimode Fibers". Such innovative and technical presentations also demonstrated that FITCE is meeting its aim of keeping in touch with leading edge ICT developments.



## 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 Polish 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 this programme was a visit to the birthplace of Chopin.



This programme culminated with a wonderful gala dinner on the Saturday night in the historic hall of the Physics Faculty of the historic Technical University.





# FITCE Young Professionals

# News

As stated on the front page of this FITCE Forum, one of the key aims of FITCE is "Ensuring that Young Professionals are able to use FITCE as a valued resource in their career development". Both at the European level, during the annual FITCE Congress, and within the national associations several important initiatives are being pursued to further these aims.

As reported on page 2 during the 2007 Congress in Warsaw a special parallel session took place where two young professionals presented interesting papers. In the 2008 Congress in Liverpool the intention will be to integrate presentations from young professionals into one or other of the sessions. There will be once again a prize, now of €500, for the best presented paper by a FITCE young professional (i.e. those people under 32 years of age on 3<sup>rd</sup> September 2008).

FITCE is also encouraging young students to attend the Congress, at considerably reduced registration fees. The Congress has always valued the mix of young enthusiastic and knowledgeable people mixing with more senior experienced professionals coming from many disciplines in the ICT industry. In the unique mixture of technical, business and social sessions in a FITCE Congress, the "old hands" learn a lot from the new ideas and approaches of the young and similarly the young professionals are given a "golden opportunity" to button-hole senior managers whom they would not normally have the opportunity to meet in their daily activities at work or in colleges.

At the national level several FITCE associations have initiated competitions to choose a Young Professional of the year and offer the winner a free invitation to the FITCE Congress. In the adjacent panel some of these initiatives are described.

## National Young Professional Competitions

### Austria ([www.fitce.at](http://www.fitce.at))



Candidates will submit abstracts on the 2008 hot topic: "**Open source – who still develops commercial software?**" by 15th February. A jury, of industry and university experts will choose the top 5 articles. The short listed candidates will write a paper and prepare a presentation. The presentations will be held at the FITCE Austria Symposium on the 25 of April. The winner is invited to present his or her paper at the FITCE congress in Liverpool

### Belgium ([www.fitce.be](http://www.fitce.be))



The Belgian FITCE Association is also running a similar competition for Young Professionals. In this case the theme is "**The Media and Communications Industry anno 2015**" A similar first selection by an industry and academic jury will take place. Afterwards Selected candidates will have to present and defend their topic in English to the jury in a pre-selection round. The three best ranked candidates from the pre-selection rounds will compete in the final round to be held on 17 April, 2008, during a public FITCE.be evening presentation event where an extended jury of senior ICT leaders will select the final winner.

### UK ([www.theitp.org](http://www.theitp.org))



The Institute of Telecommunications Professionals (ITP) which is the parent body of FITCE UK will organise the ITP Apprentice of the Year Award competition. This prominent award offers the winner the opportunity to travel and gain industry wide recognition. The award will be presented at the prestigious ITP Annual Industry Dinner in November. The winner will also win two professional development courses of their choice and the opportunity to attend the 2009 FITCE Congress.

## New FITCE President appointed

During the Annual General Meeting of FITCE on Saturday 1<sup>st</sup> September FITCE appointed a new President, Mr Barry Reynolds from Eircom, Ireland.



Photo taken shortly after the appointment of the new FITCE President in Warsaw: from L-R: Mr Wojciech Halka, President of SIT Poland, the new FITCE President, Mr Barry Reynolds, the out-going FITCE President, Mr Georgios Argyropoulos and Mr Zbigniew Krawczyk, the CD member for Poland

Afterwards Barry Reynolds said "I am keen to serve our mission and vision through close cooperation with all of the National Associations that make up FITCE. I want to make FITCE more useful to its members, sponsors and for Europe, as an Economic and Cultural Community".

## Co-operation agreement with ETIS

FITCE has recently signed a co-operation agreement with ETIS to encourage mutual participation on membership terms in activities organised by both bodies. ETIS is a membership based organisation which brings together the major telecommunications providers in Europe on key information and communication technology issues. The mission of ETIS is to enable its members to improve their business performance by personal exchange of information on using ICT effectively. ETIS achieves this by engaging its members in various working groups, sharing best-practices, benchmarking, web-based information services, discussion forums, EU projects, workshops and conferences.

For further information see: [www.etis.org](http://www.etis.org)

During the Warsaw Congress session entitled “FMC = Fixed Mobile Competition”, on 31 August 2007, Dr Roberto Saracco of Telecom Italia delivered a fascinating presentation. We are pleased to be able to reproduce below a short abridged version of this paper. The full paper which describes roadmaps for several different technologies, investigates the current evolution in wireless, examines the developments in Next Generation Networks and finally pens some scenarios for the future of telecommunications is available for download on the FITCE website ([www.fice.org](http://www.fice.org))

## Technology Evolution and Market Impact

### Roberto Saracco – Telecom Italia

It is interesting that the name of this session is Fixed Mobile Competition. Until recently such sessions were about fixed mobile convergence...and the market was, to a certain extent still is, looking for offering a seamless access that supersedes the specific technology used. Vodafone in Italy is partnering with Fastweb to offer appealing pricing based on location and not on the access technology, TIM and Telecom Italia are doing likewise.

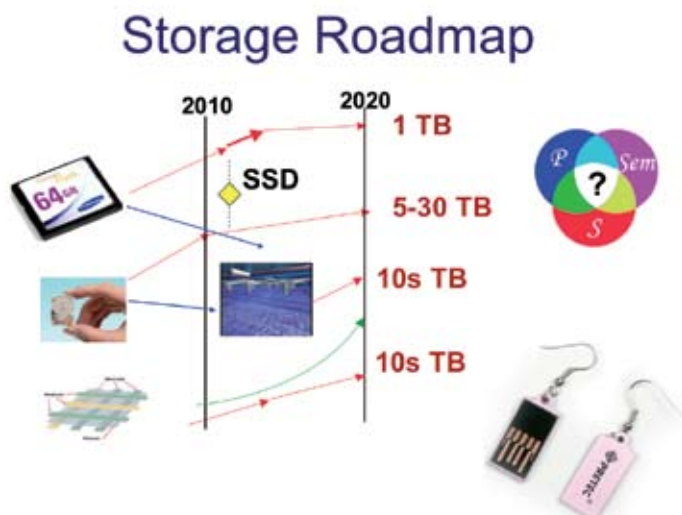
On the other hand the different players in the market place fight for market share using different technology weapons, cable, unlicensed wireless, licensed wireless, fibre, copper loop and unbundled loop. This is the competition field, as they say if all you have got is a hammer everything looks like a nail. If you have got wireless spectrum that's your asset to leverage.

How is the market going to reshape itself as new technologies are becoming “economically viable”, is technology evolution just providing bigger, speedier, cheaper solutions or is it changing the rules of the game?

In this talk I would like to share with you some ideas on some classes of technology roadmaps whilst discussing the likely impact on the biz of Telecommunications.

#### Technology Roadmaps –Storage

*(The full paper covers the roadmap for several different technologies, eg. processing, displays, data collection, wireless)*



Technologies have been steadily evolving over the last fifty years, so nothing is really new. Actually, something is new: the evolution has led, or is leading, to exceeding certain thresholds where the rules of the game change dramatically. There are several factors that are changing the environment, surely culture and society has a lot to do with that. But in this paper I will only consider technology, a fragment of the whole, but still an important enabler in this change.

Take as an example storage. Silicon memory, such as compact flash, is becoming ever more capacious. By June 2007 we had reached 64 GB on a single sliver of silicon, enough to store over 60,000 pictures or 40 full length movies. And that at the cost we paid in 1998 to store 4,000 times less information.

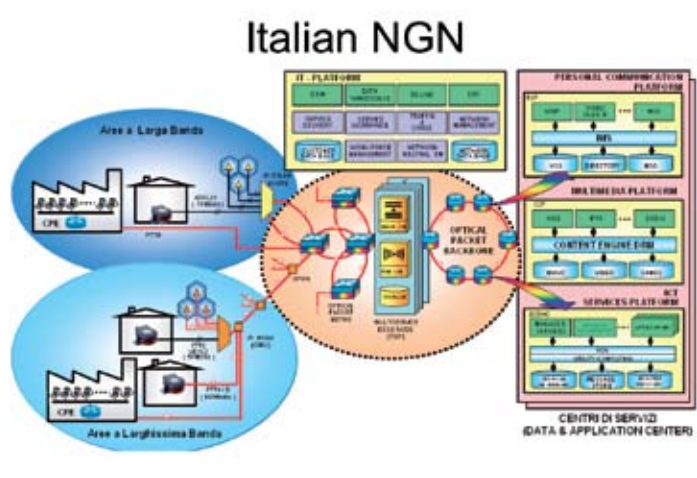
Hard drives have shrunk, as small as your thumb but much, much thinner, and their capacity has reached 2 TB (8 GB on the thumb size variety). Polymer memories are not just capacious, we measure them in TBs, and they are also extremely cheap, so cheap in fact that once you no longer care about them you just throw them away. We can imagine polymer memory not as a storage medium, rather as a distribution medium.

Storage is bound to become so cheap that it will fade away from perception: people will see the value not in the storage, but in the way the content is accessed, retrieved, customized. This brings to the fore the convergence of storage with processing and content/context semantics as the real value producer.

But storage growth in size and decrease in price are changing the values of information transport: having large local storage makes it possible to hold information locally thus decreasing the need for downloading it through the network when it is needed. One can simply download information “just in case” and this download can take place asynchronously from the time the information is needed. This slashes the value of transport. You download info when you have a free access. Downloading on the move is unlikely and revenue generation for mobile Operators is dim.

Secondly, local storage makes it possible in most cases to download information in a burst mode, not in streaming mode and that, again, decreases the perceived value of the network pushing towards best effort/internet architectures. Thirdly, the presence of information at the edge creates alternative sources of information, thus enabling Vid/Bit Torrent architectures. Fourthly, the supposed asymmetric flow of information is no longer true. There can be as much demand for uploading as there is for downloading. Peer to peer traffic is growing, ADSL, including 2+, does not meet the need of users. Symmetrical access is required, with possibly dynamic bandwidth capacity management.

**Next generation networks**

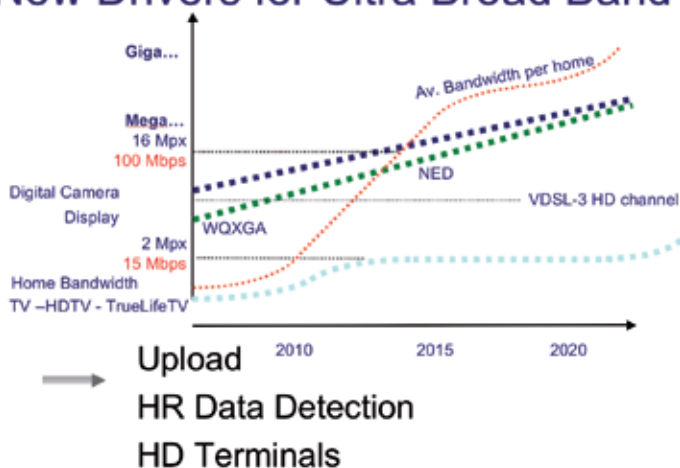


In Italy Telecom Italia has launched an ambitious project that completely reshapes the distribution network and introduces architectural changes to open up the network resources to third parties for the creation and delivery of new services.

On the distribution network the plan requires significant deployment of optical fibre. The fibre reaches most of today's cabinets (over 100,000) and in some cases reaches the buildings depending on the local conditions to achieve the optimum economical return.

Integral to the plan is the deployment of a pair of fibres for every cabinet to feed radio antennas, thus ensuring a high density radio coverage. That will ensure the availability of a radio infrastructure sustaining high density wireless traffic flow.

**New Drivers for Ultra Broad Band**



All these evolutions result in a progressively increased availability of bandwidth at low cost for the end user. The question is if the end user will really benefit, or will even be using this increased bandwidth. The immediate answer (beyond the generic one that states that the more

bandwidth available the more bandwidth will be used) is pointing at television channels. Leaving out any consideration on the real economic returns that can be provided by carrying television channels over the telecommunications network (that depends strongly on different geopolitical situations) one can observe that each television channel (HD) consumes bandwidth in the range of 15 Mbps. Given that it is most unlikely to have more than 3 channels being used in parallel by a single home one has to say that any bandwidth in excess of 50 Mbps is unlikely to be consumed by television (video on demand, movies...).

What can be the use then for the 100 Mbps and more that NGNs are making a reality? Higher definition will consume more bandwidth, but the life cycle of television is measured in 20 years and more so it is unlikely to see ultra high definition television (such as the Ultra High Definition TV, being studied in Japan at 32 Mpixels vs the 2 Mpixels of today's HDTV) before 2020.

If we look at the consumer world we see that many consumers have today much higher definition in the content they are producing: a digital camera is likely to produce 5 Mpixel photos, many are in the 10 Mpixels and the trend is to have 10+Mpixels widely available in the next decade at the mass market level.

This content will require much higher bandwidth to be exchanged over the network, a 10 Mpixel video pushes the required bandwidth to the 100Mbps range.

Looking at the enterprise market we can foresee that Gbps interconnection will stimulate delocalized processing and storage and in turn it can create a completely new way of work organization, that is in synch with the need to be closer and more responsive to clients and less taxing on the environment in terms of petrol consumption.

**Conclusions**


In this paper I have tried to look at technology evolution in terms of the potential disruption on the telco biz. It is not just technology: market dynamics, social focus and concern (privacy and security to mention just one), ambient dynamics (energy shortage, pollution, financial fluctuation...) are probably even more important factors in the evolution of the telecommunications fabric.


NGNs, such as the ones being devised and deployed by Telecom Italia, are a major milestone for the coming years, in synch with technology and with the new biz environment. They open up new communications scenarios requiring in many cases new biz models.


The biz of telecommunications will be facing actors offering communications for free, a price hard to beat, and it probably will have to go "underground" in terms of connectivity, disappearing from the main stage but enabling a far larger business environment.


Telecommunications as we knew it is going to disappear, to leave space to a much more pervasive one. Telecommunication is dead, long live telecommunications.


## International Newsletter November 2007


 **Austria** Telekom Austria: special price offer for fixnet, broadband and mobile “let the lines glow”. The new price offer “KombiPaket” from Telekom Austria which consists of fixed line telephony, flat rate broadband internet access and mobile telephony is placed at an unbelievable price of €19,90 per month. 7.000 customers are switching to the new tariff every day, many of these new customers are competitors’ customers.


 **Germany** German alternative operator Arcor has started offering Dell PCs as part of a broadband and telephony bundle. The offer starts at €59.95 per month for a basic Dell PC, with an option to pay an additional €10 per month for a laptop, or €20 per month for a multimedia and gaming computer.<sup>1</sup> Deutsche Telekom has offered the bundle product „Call & Surf Comfort“ (broadband + voice) since 11 November at a reduced rate of €39,95 instead of €44,95.<sup>2</sup>


 **France** French mobile operator SFR, which recently launched a triple-play offer of broadband ADSL (maximum 20 mbps), fixed telephony (flat rate to 40 international destinations) and IPTV, has added a 3G PC datacard (“Clé Internet 3G+”) to its bundle product. The Quad-Play bundle will cost €29,90 per month.<sup>3</sup> Telecom Italia has launched, via subsidiary Alice, a new bundle product in France, which consists of VoIP and IPTV. Target group are the 43 percent French households with no PC.<sup>4</sup>


 **UK** BT has launched international Wi-Fi travel vouchers (branding: “iBahn”) for the hotspots of BT Openzone. A voucher for 500 minutes will cost €56 in Europe and €39 in the USA. The offer is primarily focused on business customers. BT offers a self install version for BT Vision (IPTV). The costs will be about €42. BT is launching its own magazine for BT Vision (branding: On magazine). There will be a new version every second month. The content of the magazine will be information about film, TV, sports, music and kids entertainment for BT Vision.<sup>2</sup>

 **Ireland** Irish alternative telecom, Perlico Communications, offers broadband connection with 1 Mbps or 2 Mbps downstream as cheap add-on (6 month for 99 cent) to telephony.<sup>2</sup>

 **Italy** Tele2 has launched in Italy a bundle product consisting of a broadband connection (4 Mbps downstream) + voice for just €29,90 per month. The product is called “Tutto Tele2 4 Mega”. Telecom Italy has increased the broadband for customers of Alice broadband with 2 Mbps downstream to 7 Mbps downstream. New customers will also receive the 7 Mbps downstream.<sup>2</sup>

 **Netherlands** Dutch operator KPN has decided to use its HSPA mobile technology to offer broadband services in thinly populated areas.<sup>2</sup>

 **Switzerland** The communication provider Orange Communications SA has launched together with the Zurich energy producer and deliverer EWZ the pilot project „Quadruple Play“. 55 households which are connected to the EWZ’s fibre network will receive internet, TV, landline and mobile phone from October 2007 to March 2008. Later in 2008 there will be an entrance offer, which will cost under €59,60.<sup>5</sup>

 **Spain** Telefonica de Espana has launched a „Duo ADSL“ bundle product for rural areas in Spain. The service includes a flat-rate voice tariff and broadband internet. The start up product will cost €45 per month for broadband with a downstream of 512 kbps. Telefonica de Espana has also launched a music service offering an unlimited number of music downloads. Partners of this service are, Universal/Vale, Warner, EMI and a lot of independent labels.<sup>6</sup>

### Sources:

- 1 Telecom Markets @ Informa telecoms & media
- 2 Telecompaper
- 3 TeleGeography
- 4 CabSat Daily (Informa)
- 5 heise online
- 6 Telecompaper





## The Magical Mystery Tour Next Stop... True Convergence?

*"The communications industry is undergoing one of the most exciting and fundamental transformations in its entire history. What new opportunities and challenges will be opened up by convergence and the transition to next generation services?"*



### Congress Themes:

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

Have you got the answers? "Step right this way...  
The magical mystery tour is waiting to take you away"!

We invite you to join us and to participate in this 47th European FITCE Congress in Liverpool, European Capital of Culture, 2008

- By submitting and presenting papers
- By attending the Congress, joining in the lively dialogues, and networking with European colleagues
- By participating in the social events in the evenings

Echo Arena & BT Convention Centre,  
3rd to 6th September 2008  
Liverpool, UK

Early sponsors and partners:



[www.fitce08.eu](http://www.fitce08.eu)

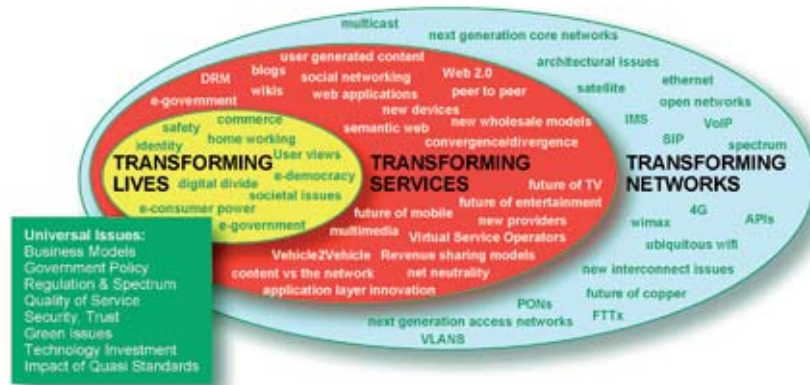


47th European Congress  
2008



# CALL FOR PAPERS

Abstracts of proposed papers are now invited for the 47th 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 which 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 (email, telephone, and postal address).
- Name of the national association.

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

For submission of abstracts and further details see:  
<http://www.fitce08.eu/>

## Deadlines:

- Submission of abstracts via web portal by 29th February 2008.
- Authors will be advised of the outcome of the paper selection by early April 2008.
- The full text of the selected papers (maximum 6 x A4 in English) is required by end of May 2008.

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 2008.

[www.fitce08.eu](http://www.fitce08.eu)

