

PCG#14_25

Agenda 11

UMTS Forum

Market update, activities and workplan 2004/5

Jean-Pierre Bienaimé

Chairman, UMTS Forum



3G/UMTS Global Update (April 2005)



- 65 networks in commercial service in 30 countries with many others in trial/pre-launch
- More than 22 million 3G/UMTS subscribers
- 130+ 3G/UMTS licenses awarded in 45 countries
- WCDMA take-up faster than GSM at the same stage



3G/UMTS Terminals



- 140+ 3G/UMTS terminals and PC cards commercially available or announced by a growing range of European, Asian and US manufacturers
- Latest models compare with 2G handsets in terms of battery life, weight and size



UMTS Forum Key Areas of Activity in 2005



Spectrum & Regulation

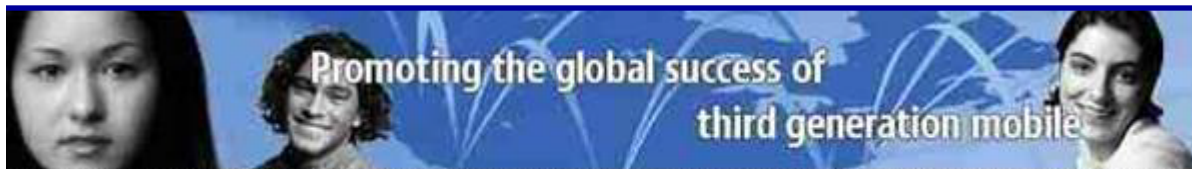
Studies and contributions on harmonisation of global spectrum and additional spectrum arrangements for IMT-2000 and its evolutions, in the perspective of European decisions and in preparation of WRC-07

In particular, the UMTS Forum has contributed to the development of the European decision harmonizing the frequency band 2500-2690 MHz for IMT-2000/UMTS and defining the channelling arrangements

Guidance to regulatory authorities and national administrations on licensing and other 3G-related issues

Promotion

Dialogue with media, investment communities and public authorities; presence at leading industry events; partnerships with international standards institutions and other industry bodies (ITU, EC, 3GPP, ETSI, CEPT, GSMA, 3G Americas, A3G Russia,...)



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Selected Regional Events & Visibility

UMTSF presence supported by local PR/press activities...

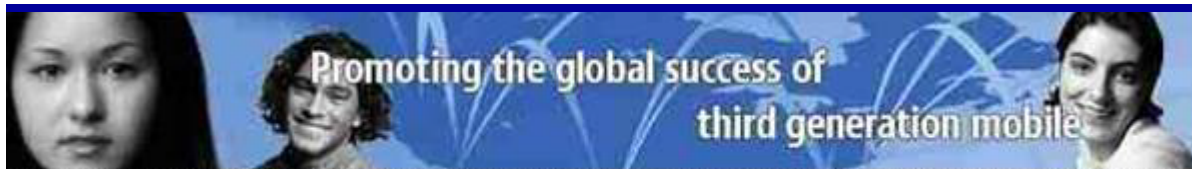
- **Russia: UMTS Forum joint workshop with 3G Association Russia, Moscow (June 2004)**
- **China: 3G Mobile International Summit, Beijing (June)**
- **Brazil GSM Congress (June)**
- **Tehran Telecoms Summit (July)**
- **Korea: ITU Telecom Asia, Busan (September)**
- **Australia: AMTA Congress, Sydney (September)**
- **China: UMTS Forum workshop, Beijing (October)**
- **UK: Mobile Infratech/UMTS Congress, London (October)**
- **Brazil: Futurecom, Florianopolis (October)**
- **Hong Kong: 3G World Congress & Exhibition (November)**
- **South Africa: GSM Africa 2004, Cape Town (November)**
- **Japan: 3G Mobile World Forum, Tokyo (January 2005)**
- **GSM India (January)**
- **India: ICC-05 Conference, IIT Kanpur (February)**
- **Korea: LG Mobile Technology Forum, Seoul (February)**
- **Spain: 12th CEPT Conference, Barcelona (April)**



Regional focus: Brazil

Ongoing promotional activity and dialogue with authorities

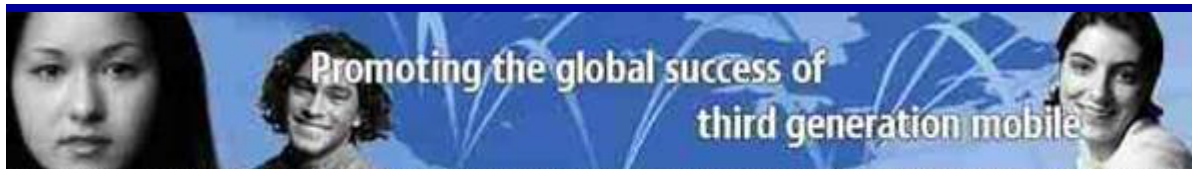
- **Mission (21-25 June 2004) to Brasilia, Rio and Sao Paulo:**
 - **Meetings with Mr Ziller, new Chairman of ANATEL, Brazilian Regulator, and with Jarbas Valente, Superintendent 3G Services**
 - **Presentation of key messages on 3G/UMTS introduction in Brazil and Latin America**
 - **UMTS Forum dialogue with ANATEL: public consultation on 450MHz introduction... activities focused around 4th GSM Brazil Congress**
- **Response from the Forum to ANATEL Public consultation on 450 MHz, coordinated by Mario Baumgarten and UMTS Forum Spectrum Aspects Group.**
- **Presence at Futurecom, Florianopolis (October 2004) on the ETSI/@lis stand. UMTS Forum key messages regarding 2G>3G evolution delivered during conference and exhibition.**



Regional focus: India

Ongoing promotional activity and dialogue with authorities

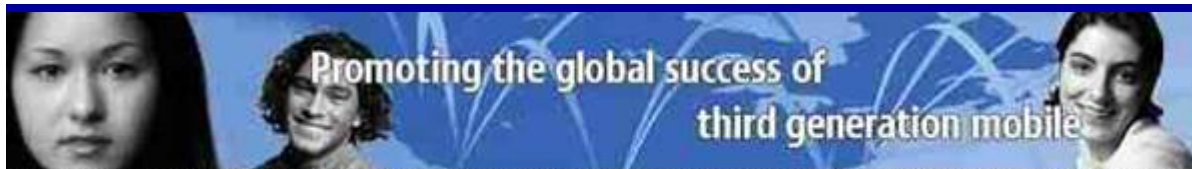
- Meetings with the Telecoms Regulatory Authority of India (TRAI) in March and April – presentation of the benefits of licensing 3G / IMT-2000 in the WARC-92 bands; positive cooperation with TRAI initiated.
- Response from the UMTS Forum to TRAI Public consultation on spectrum management issues, coordinated by UMTSF Spectrum Aspects Group.
- Follow up of the Indian situation with Cellular Operators Association of India (COAI); lobbying actions to be pursued in response to threats on 1900MHz band, in coordination with COAI, GSMA and GSA.



Regional focus: China

Ongoing promotional activity and dialogue with authorities

- **12 October 2004: successful 2nd UMTS Forum workshop in Beijing, co-organised with the China 3G Leading Group (MOST, NDRC, MII) and BUPT; with the support of the European Commission and GSMA plus sponsorship of Siemens, Alcatel-ShanghaiBell, Huawei, Ericsson and Nortel.**
 - **MIIT and CATR presented notably the first results of the trials of 3G radio access networks and terminals, that would be officially commented at the “3G in China” Global Summit 2004, organised by CATR in Beijing on 8th-10th November 04.**
 - **Attendees at the UMTSF workshop represented all the main operators, administrations and manufacturers involved in 3G licensing and deployment in China.**
- **UMTS Forum presence at 3G World Congress in Hong Kong 15-18 November 2004, including follow-up with Chinese administration.**



Recent UMTS Forum Reports

Report 37 – published April 2005

TITLE: “Magic Mobile Future 2010-2020”

DISTRIBUTION: UMTS Forum membership, ITU, EC

OBJECTIVE: Assist ITU process for the preparatory work of WRC-07 under agenda item 1.4, concerning long term market forecasts needed to determine spectrum requirements for future development of IMT-2000 and systems beyond IMT-2000.

BACKGROUND: Builds on previous UMTSF market studies to provide forecasts for the next decade (2010-2020) on the evolution of penetration rate (including machine-to-machine applications), expected services and evolution of usage of these services.

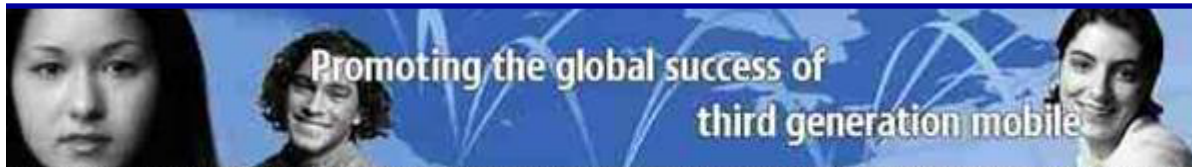


Recent UMTS Forum Reports

Report 37: 'Magic Mobile Future 2010-2020'

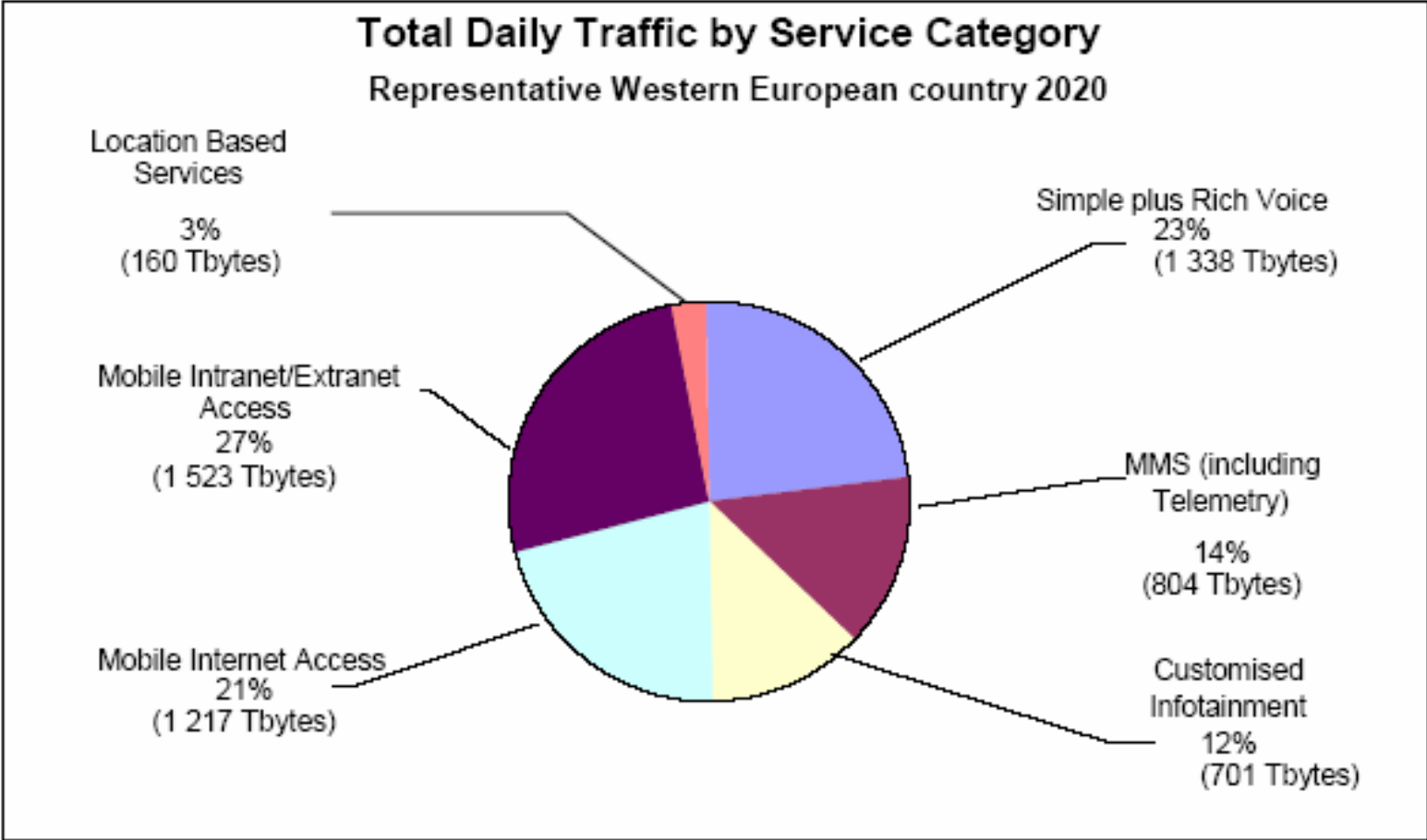
KEY MESSAGES:

- Global socio-economic demographic profile will be characterised by an ageing population, labour force evolution and improved education, balanced by increasing concerns regarding issues such as security
- Access to broadband connectivity and mobile services will continue to rise; technical breakthroughs will see a proliferation of smaller, smarter devices and interworking between network technologies
- Emerging mobile services will include object identification and sensor networks; health monitoring; location discovery; digital content and entertainment; m-payments, m-government and m-education
- Most likely scenario is one of “Balanced, Broad-based Growth”. Businesses will integrate mobile deeply into their operational practices as quality and interoperability concerns no longer prevail. Other communications industry service providers are effectively converged into mobile-led companies, while content and application providers find a healthy, growing marketplace.





Report 37: key findings



From 2012 to 2020, total daily traffic in a typical Western European country will grow from 250 Tbytes to almost 5750 Tbytes – an increase of 23x



Recent UMTS Forum Reports

Report 38 – published February 2005

TITLE: “Coverage Extension Bands for UMTS/IMT-2000 in the bands between 470-600 MHz”

DISTRIBUTION: UMTS Forum membership, ITU, CEPT

OBJECTIVE: Provide input to ITU Regional Radiocommunication Conference (RRC) – 2nd session to be held in May/June 2006 – topic on global harmonisation of frequencies suitable for IMT-2000 coverage extension bands

BACKGROUND: RRC-06 has a mandate to develop an agreement concerning digital broadcasting services within band III (174-230 MHz) and band IV/V (470-862 MHz) frequencies. There is an opportunity to bridge the ‘digital divide’ through the use of the lower bands between 470-600 MHz for IMT-2000 services.

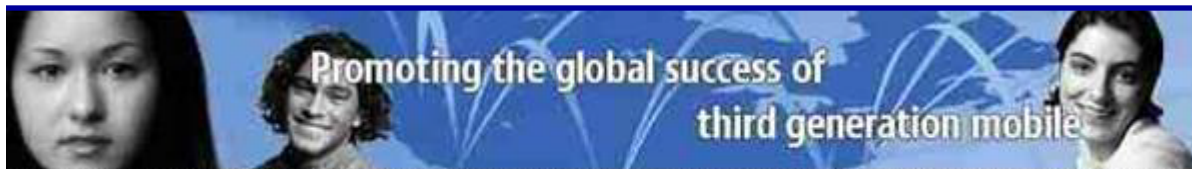


Recent UMTS Forum Reports

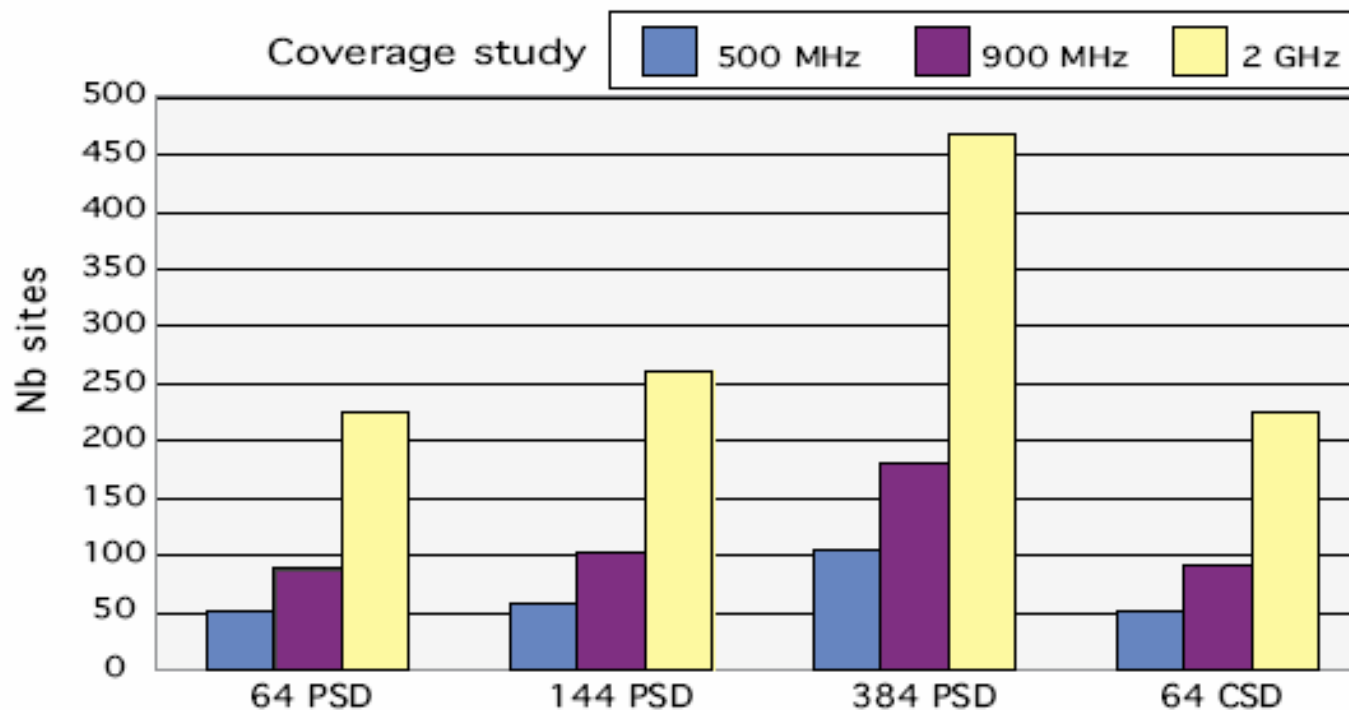
Report 38: 'Coverage Extension Bands for UMTS/IMT-2000 in the bands between 470-600 MHz'

KEY MESSAGES:

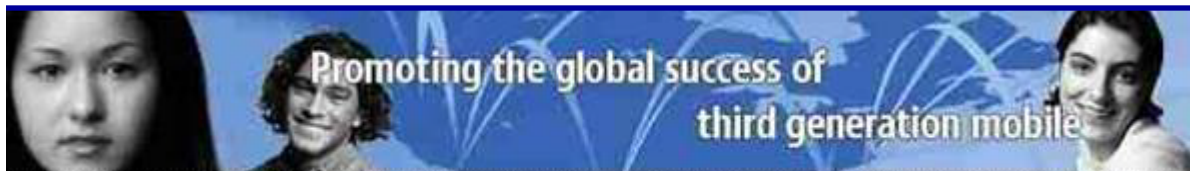
- **Harmonised spectrum can provide better coverage for UMTS/IMT-2000 in large areas of low population density. Indeed, lower frequency bands could provide cost effective coverage in such regions where capacity limitations are not typically a problem.**
- **Digital terrestrial broadcasting switchover will offer a more efficient use of frequency resources. After analogue broadcasting switch-off, a certain amount of spectrum - referred to as the 'digital dividend' - will be released, making possible the implementation of new services.**
- **The global success of GSM and UMTS systems is based on a harmonised approach that has allowed economies of scale and global roaming. There is therefore a need to concentrate on a broadcasting plan that provides the possibility of a harmonised digital dividend.**



Comparison of number of base station sites at 500 MHz, 900 MHz and 2 GHz for various 3G services



The band 470-600 MHz allows UMTS/IMT-2000 operators to extend coverage of their network in rural areas at significantly lower cost. UMTS/IMT-2000 operators would need to deploy some five times more base station sites at 2 GHz compared to 500 MHz and more than two times more base stations sites at 900 MHz compared to 500 MHz.



Report 38 recommendations

Recommendation 1

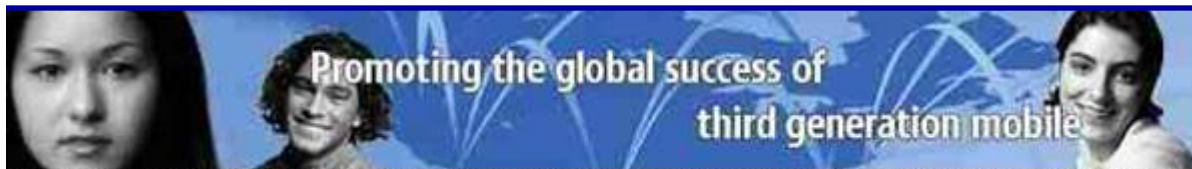
ITU RRC should develop the new digital broadcasting plan so that the digital dividend, resulting from digital switchover, is harmonised within the band 470-600 MHz. The UMTS Forum supports to use this harmonised digital dividend, or parts of it, for Mobile Services.

Recommendation 2

The UMTS Forum supports identification of a new Coverage Extension Band on lower frequency bands for IMT-2000, to cover part of WRC-07 Agenda Item 1.4 and its related Resolution 228. This new Coverage Extension Band should be allocated on a primary basis to Mobile Service in all three ITU Regions and identified for terrestrial IMT-2000.

Recommendation 3

The UMTS Forum considers that 2x30 MHz of paired spectrum would provide a viable minimum Coverage Extension Band for UMTS/IMT-2000.

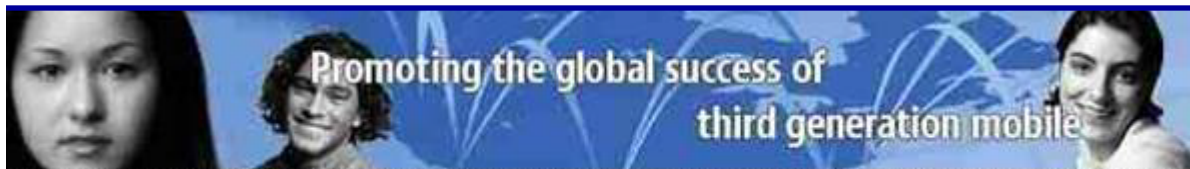


Recent Publications

'3G/UMTS: Towards mobile broadband and personal Internet'

White Paper published February 2005

- Early market experiences and lessons learned: perspectives on first network launches, terminals, services and tariff plans
- Standardisation: creating a stable environment for deploying 3G/UMTS mobile broadband services
- 3G/UMTS considered in the context of developments in other fixed and mobile networks
- A look to the future... 3GPP roadmap and mid- to long-term evolution of 3G/UMTS:
 - Radio Access Network Developments
 - Air Interface Developments (HSDPA...)
 - Core Network Developments (IMS...)



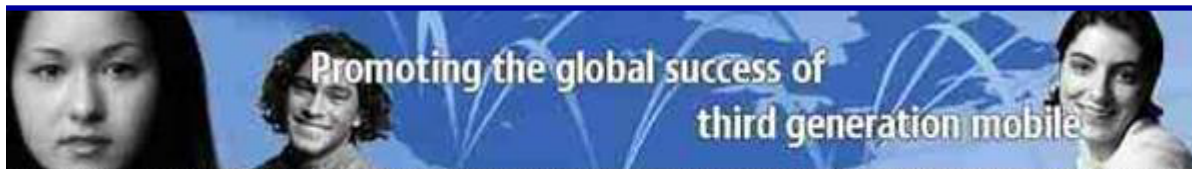
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2005 Workplan

Key areas of activity

- Continuing provision of inputs in anticipation of the next World Radiocommunication Conference (WRC-2007) on spectrum requirements for 3G/UMTS evolution and coverage extension for large areas of low population density
- Contributing via 3GPP and with other industry fora to the evolution of fixed/mobile via a smooth IP migration path, and of radio access network enhancements via HSDPA/HSUPA
- Offering guidance to emerging markets and developing countries
- Promoting 3GPP standards, the Forum's reports and papers globally and respond to forthcoming consultations from Regulators and Public Authorities
- Assessing the new value chain for 3G/UMTS and beyond (including the role of IT/media companies) plus studies of other complementary technologies



For more information...

www.umts-forum.org



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