UMTS Forum activities
Perspectives of an industry body

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About The UMTS Forum

Promoting the global success of UMTS / WCDMA

• The world’s only industry association uniquely committed to the global success of UMTS mobile systems
• Cross-sector membership comprises operators, manufacturers, regulators, application developers, research organisations and IT industry players from 40 countries worldwide
• Unites all market players on a peer-to-peer basis
About The UMTS Forum

Selected areas of activity – specified in UMTSF work plan

- Dedicated to study market and technology aspects of UMTS/WCDMA
- Charting the evolution roadmap to UMTS for mobile operators
- Delivers market focused inputs to other key stakeholders e.g. investors, standardisation bodies (ref. ETSI / 3GPP, ITU), media etc
- Issues under study include IMT-2000 spectrum, market aspects, IMS, WLAN, TDD
- Current study (2003) into “Social Shaping” – analysis of UMTS and the customer experience, leading to recommendations to operators, manufacturers and developers of 3G services & applications

UMTS Forum Activities

Promotion and Education

- Regular briefings to international media and financial analysts to provide objective, accurate information on technical and commercial progress of UMTS
- Presence at more than 65 worldwide industry events annually
- Regular publication of authoritative, widely read reports and white papers on key topics relating to UMTS. Issues include: market, technology, spectrum, regulation, sociological issues

New White Paper published…
MOBILE EVOLUTION: SHAPING THE FUTURE
…available for download from web site
IMT-2000 Spectrum

Spectrum Aspects Group

- Spectrum Aspects Group (SAG) studies availability and harmonisation of global spectrum for IMT-2000 and beyond
- Traffic characteristics studies for IMT-2000 spectrum, including a review of utilisation studies on terrestrial and satellite spectrum
- Influence ITU-R WP8F and regional groups (CEPT ECC PT1) regarding harmonised frequency arrangements for UMTS
- Ongoing studies re. WLAN spectrum for regions e.g. Latin America
- Lobbying inputs to CISPR regarding noise emission limits across GSM1800/UMTS bands
- Inputs to World Radiocommunication Conference…

IMT-2000 Spectrum

WRC 2003 Key Messages (June 2003):

- UMTS Forum believes that for terrestrial IMT-2000, it is vital that the band 2500-2690 MHz (which was identified by WRC-2000 for IMT-2000 on a global basis) must be unconstrained by interference from Broadcasting Satellite Systems in relevant parts of the band.
- Furthermore, it is crucial that an effective regulatory and technical regime exists to underpin long term planning of terrestrial IMT-2000 in the 2.5 GHz band.
- UMTS Forum believes that for IMT-2000 to develop to its full potential it is essential for WRC-03 to propose an appropriate agenda item for WRC-07 to review and take any necessary action on results of further studies on the spectrum requirements for the future development of IMT-2000.
Other Activities

Additional areas of study

Technical and implementation issues relating to UMTS, including:

- the roles of ‘complementary’ technologies such as WLAN and use of TDD spectrum for mobile solutions by operators.
- Investigation into the use of IP in a mobile environment (IMS)
- Studies on security awareness and its relevance in a UMTS environment
- Potential importance of a mobile Top Level Domain (mTLD)
- Review of settlements, billing and charging issues for UMTS.

Close Co-operation with ITU

Regular participation of UMTS Forum in ITU sector groups:

ITU-T: participation in Informal Summits (e.g. Informal Forum Summit, San Francisco, July 2003)
ITU-D: involvement in ITU regional seminars and other contributions
ITU-R: work of UMTSF Spectrum Aspects Group with ITU experts
2003! Worldwide UMTS Update

UMTS is happening now...

- WCDMA customers now reaching 1 million worldwide
- Licensing largely complete in Europe, continues in other world regions. >98% of 3G licenses awarded so far (approaching 120 operators) specify WCDMA
- Operator deployment plans characterised by soft launches, followed by commercial introductions during 2003/2004
- Growing choice and diversity of terminal designs from leading vendors
- Increasing numbers of customers already experiencing a first taste of “3G-like” services via GPRS and other 2.5G networks

GSM: The #1 Choice Globally

GSM success story continues

- GSM will reach 1 billion subscribers later in 2003: More than 500 GSM networks in 195 countries worldwide
- GSM demonstrates the importance of OPEN STANDARDISATION to benefit the market
- Large GSM subscriber base drives economies of scale for operators, manufacturers and end users
- GSM is fastest growing mobile system in the Americas; also rapid GSM growth in other countries e.g. China
- GSM provides a clear evolutionary path via GRPS to WCDMA/UMTS
3G Technology Choices

Almost 120 operators worldwide have selected WCDMA

Source: ART

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Source: ART

Operator Migration Choices

Source: ART
UMTS: The benefits to operators

Optimising resources delivers an economic advantage

- UMTS builds on investments in GSM providing a network optimisation opportunity for operators
- UMTS gives operators additional capacity to support more subscribers (especially in urban centres) as well as greater speeds and ability to support new multimedia services
- UMTS operators can retain existing 2G core network, IT and service platforms; can also re-use existing sites and site sharing
- UMTS is the catalyst that will generate increased competition, giving operators the opportunity to increase differentiation in their service offerings

The value proposition

Laying the foundations for long-term growth

- UMTS allows operators to add additional network capacity at a cost up to 8 times lower than providing incremental 2G capacity
- UMTS will not in itself significantly increase ARPU in the short term, but it will provide an opportunity for operators to strengthen their free cash flows
- UMTS will generate new revenues in the medium/long term when all actors (clients, operators, service providers, media/content developers etc) have assimilated this new technology
- UMTS gives the opportunity for operators to reduce the proportion of investments in relation to total turnover
- UMTS is ‘future proofed’ – safeguards against future overcrowding in today’s second generation networks
WCDMA: Built for the future

Future enhancements to WCDMA

• High Speed Downlink Packet Access (HSDPA) increases downlink speeds to 10 Mbps
• IP Multimedia Subsystem (IMS) will provide advanced IP capabilities for Multimedia Services
• Interworking with other networks such as DVB and DAB will take advantage of content offerings that can be delivered efficiently to small form factor terminals.

Conclusions

• UMTS builds on existing investments in GSM, benefiting from large economies of scale and providing a stable, open platform for developers of new services and applications
• WCDMA technology offers additional capacity in fresh radio spectrum at lower incremental cost compared with GSM, allowing operators to support new customers and new services
• Enhanced 3G: roadmap for WCDMA “future-proofs” operator investments through the next decade and beyond.

UMTS/WCDMA is the most cost effective path to 3G for more than 75% of the world’s wireless market