



## Overall Conclusions

### 3.2.2: Seminar Feedback and Conclusions



#### *ITU-BDT Regional Seminar on IMT-2000 for the Arab Region, Doha, Qatar 29 Sept. - 1 Oct. 2003*

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## Session 1.1 Opening

- **Welcome address**
  - Sh. Abdullah Bin Mohammed Bin Saud Al-Thani, Chairman, QTel Board of Directors
- **Keynote speech**
  - Engineer Mahmood M. Sayyar, Director, Gulf Cooperation Council Telecommunication Bureau
- **Objectives for Seminar**
  - John Visser, P.Eng., Vice-Chairman of Seminar, Chairman ITU-T SSG on "IMT-2000 and Beyond"
  - message from Hamadoun Touré, Director, ITU-BDT
  - objectives for seminar
  - overview of ITU structure to set context



## Session 1.2

### ITU and IMT-2000 Overview

- Presentations addressed Core Networks (ITU-T), Radio Technology and Spectrum (ITU-R) and support to developing countries (ITU-D)
- Consistent with mandate per Res. 43 (WTDC-02), ITU-D Q.18/2, Program 2 point 1.4 using project-oriented approach
- Appreciation for the complex and multi-disciplinary studies carried out by ITU
  - outlook for IMT-2000 development and expansion may be optimistic
- Closer and more tailored direct involvement needed to better assist in the decision processes and implementation of 3G systems

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## Session 1.3

### IMT-2000 Family Members

- Presentations highlighted differences in approaches, strategies for 3G in different regions
  - expressed by presenters from CDG and UMTS Forum
- CDG focuses on CDMA2000 as the leading IMT-2000 radio technology for 3G
  - highlighted benefits, capabilities of CDMA-2000
  - included deployment statistics, growth
- UMTS Forum activities presented: aiming for success of 3G through adoption of WCDMA
  - described advantages of WCDMA
  - highlighted need for 2500-2690 MHz band (per WRC-2000)
  - included deployment statistics

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## **Session 1.4**

### **Standardization of IMT-2000 Family Members Outside ITU**

- **Partnership Projects 3GPP and 3GPP2 developing specifications for IMT-2000 Family Members**
  - 3GPP: GSM, GPRS, EDGE, W-CDMA, T-CDMA
  - 3GPP2: CDMA2000 1xEV-DO, 1xEV-DV; ANSI-41
- **Specifications transposed by partner SDOs**
- **Transpositions referenced by ITU-R WP 8F (Rec. M.1457) and ITU-T SSG (Q.1740-series) to create global standards**
- **Noted convergence on future directions, especially IP Multimedia Subsystem as basis for enhanced end user services**

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## **Session 1.5**

### **Evolution and Migration to IMT-2000 and Systems Beyond**

- **Complementary use of GSM & WCDMA to meet user needs while operators migrate to 3G**
- **Business considerations**
  - License auctions are the wrong way to go
  - Users care about services, not technology
  - No incentives to delay roll out, but transition needs to be well planned
- **Benefits of a common service platform**
  - 3GPP and 3GPP2 working together on a common IMS
  - IMS can become THE common platform
  - Leverage core competencies of ITU/3GPPs/OMA

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## **Session 2.1**

### **Evolution and Migration to IMT-2000 and Systems Beyond**

- **A developing country perspective on leveraging fixed infrastructure for 3G: a win-win scenario!**
  - use fixed network as a 3G access network through appropriate terminals, PANs, WLANs, etc.
  - an integration of existing infrastructure and technologies to maximize 3G value to end users in a developing country
- **A forward looking perspective on the convergence of Internet, broadcasting and telecommunications, leading to network transformation**
  - seamless services and simplified service access for the end user a key driver
  - transform networks through eliminating boundaries

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## **Session 2.2a**

### **IMT-2000 Regulatory and Operational Aspects**

- **Provided overview of spectrum allocations, issues in designating spectrum, and regulatory considerations**
- **Noted that regulatory matters were not presented by regulators!**
  - (J. Visser: shows need for partnership among regulators, operators, vendors in order to achieve optimal results)
- **Question on health hazards of RF from mobile UE**
  - studies to date: no proof of a hazard, just slight increase in temperature with no effect on user

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## **Session 2.2b**

### **IMT-2000 Regulatory and Operational Aspects**

- **BDT presentation provided theory and practice , pros and cons of licensing methods (auction, beauty contest, etc.)**
  - provided templates for adaptation to local situation to assist the countries in decision process (scoring matrix)
  - Provided examples on conditions and obligations to be considered during the process to award licenses
- **Next presentation focused on a case study (Portugal) demonstrating licensing principles**
  - Need to consider the overall set of objectives to be pursued
  - While a national matter, essential to consider the situation in an international context
  - A focus on the long term will help avoid inappropriate short term decisions

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## **Session 2.3**

### **Implementation**

- **Mobile GSM/UMTS networks: a Universal Communication and Services solution**
  - Strong world-wide need for telecommunications access
  - Revenue generator to address rural market
  - Mobile infrastructure a cost effective solution
  - Enables evolution to broadband
- **Technology Options in Migrating to CDMA2000**
  - Why migrate: spectrum efficiency, operator flexibility, attract investment, respond to market changes
  - Use of existing capital expenditures, reduce further capital costs, increase capacity, increase growth opportunities
  - Multiple migration options described

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## **Session 2.4**

### **Evolution to IMT-2000**

- **Noted planning differences for incumbents vs. green field operators**
  - spectrum needs to address not only more users but increasing data usage
  - migration, dual service: 2G/3G
  - cell site planning, near-far problem
- **Driving factors to 3G; challenges, success factors**
  - evolution and migration paths identified
  - several points of comparison
  - use of 450 MHz spectrum for coverage in rural areas
- **Smart antenna technology**
  - advantages; algorithms to predict coverage
  - a technology to assist in addressing coverage issues

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## **Session 3.1**

### **Mobile Network Experience in the Arab Region**

- **QTel described their plans for migration to 3G**
  - information on Qatar and on QTel's mobile network
  - emphasis on meeting end user expectations
  - details of trials and deployment planning
- **King Saud University addressed 3G Mobile Services in the Arab Markets**
  - explored issues and challenges faced by everyone, but also regional consumer and cultural issues
- **Etisalat described their UMTS trials**
  - emphasis on quality for positive end user experience
  - information on trials, multi-vendor interoperability testing and testing of multimedia applications

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## Session 3.2 Seminar Feedback and Conclusion

A representative of each participating country expressed Opinion on the Seminar in terms of:

- General organization and timing
- Expectations and Objectives met
- Content tailored to the Region
- Utility of the dealt topics
- Topics to be better highlighted and further investigated
- Follow-Up and timing of Direct Assistance may be provided by the BDT
- Further Seminars/Workshops/Exhibitions

The details of the feedback collected from the participating countries is posted on the Web, slot 3.2.1.

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### Summary of the Feedback from the Countries:

During the question/answer sessions of the presentations, major issues identified by the participants as of significant interest from the developing country point of view were:

- Migration cost and user affordability for services and terminals
- Fixed wireless access for IMT-2000 services in urban areas
- Time-frame for migration from existing "mobile"/"fixed" towards IMT-2000
- Use of "mature" 2.5G may be sufficient for current needs but need for advanced applications such as tele-education, tele-medicine and e-government were highlighted by participants as necessary for developing countries
- Role of government subsidy for infrastructure (for affordability of services by all including universal service obligations) and advanced applications)
- Possible obsolescence of new infrastructure investments while waiting for IMT-2000 demand
- Conditions for use of spectrum (licensing / roaming / coverage / other operator obligations / ...)
- Sharing of (radio / network) resources for rapid rollout and coverage (VNO)
- How to develop market analysis / business case? (population literacy, disposable income, ...)

The delegates thanked the conference organizers, BDT and the presenters for providing an excellent forum for discussions and exchange of views. They requested BDT to take into consideration points raised in the seminar (see above) during the activities / studies of ITU-D Q.18/2. They specifically requested that another event in the form of a Workshop be organized after about 12 months to have information concerning further developments in this important area.

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