

# ITU-BDT Regional Seminar on IMT-2000 for the Arab Region



## Radio Technology and Spectrum Matters

*Colin Langtry*  
*Counsellor for Radiocommunication Study Group 8*

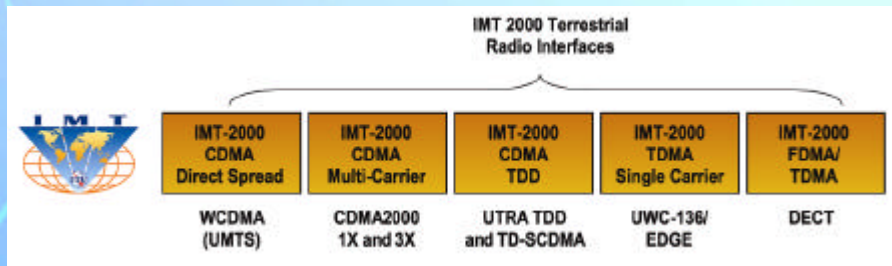
## Contents

- **IMT-2000 radio access standards**
- **Three phases**
- **Capabilities**
- **Variety of access networks**
- **Domains**
- **Spectrum aspects**
- **Workplan**



## IMT-2000 Radio Access Standards

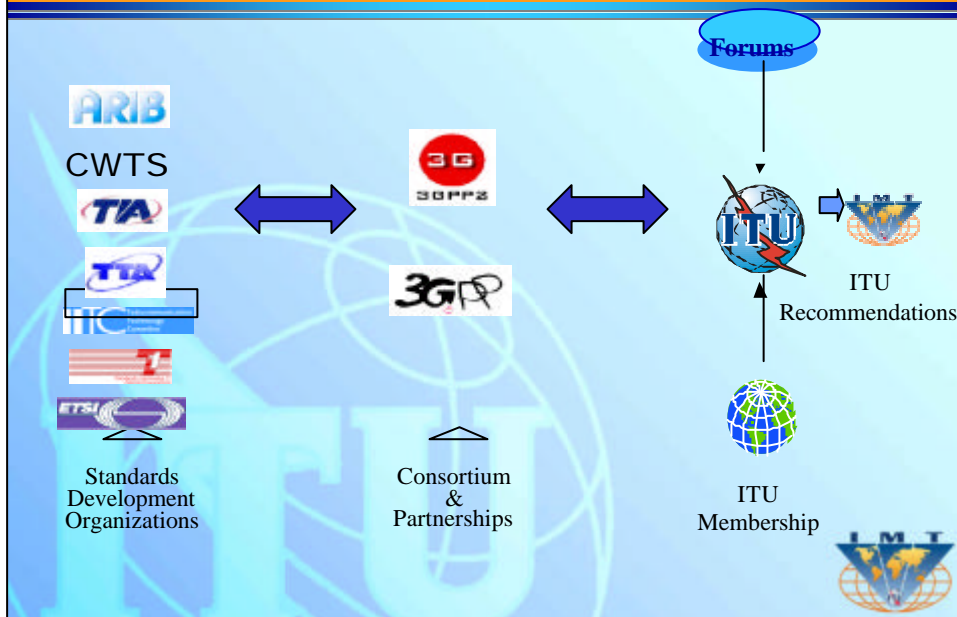
- A reminder .....



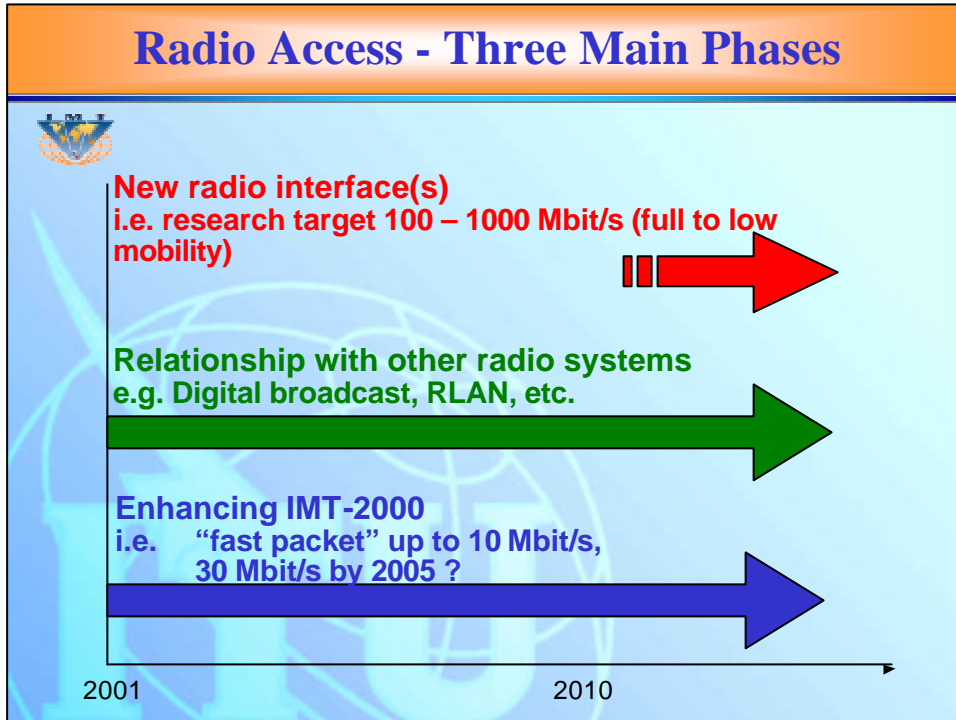
- Designed mainly in response to market, technology & regulatory opportunities & segments
- Many of these standards are already being enhanced



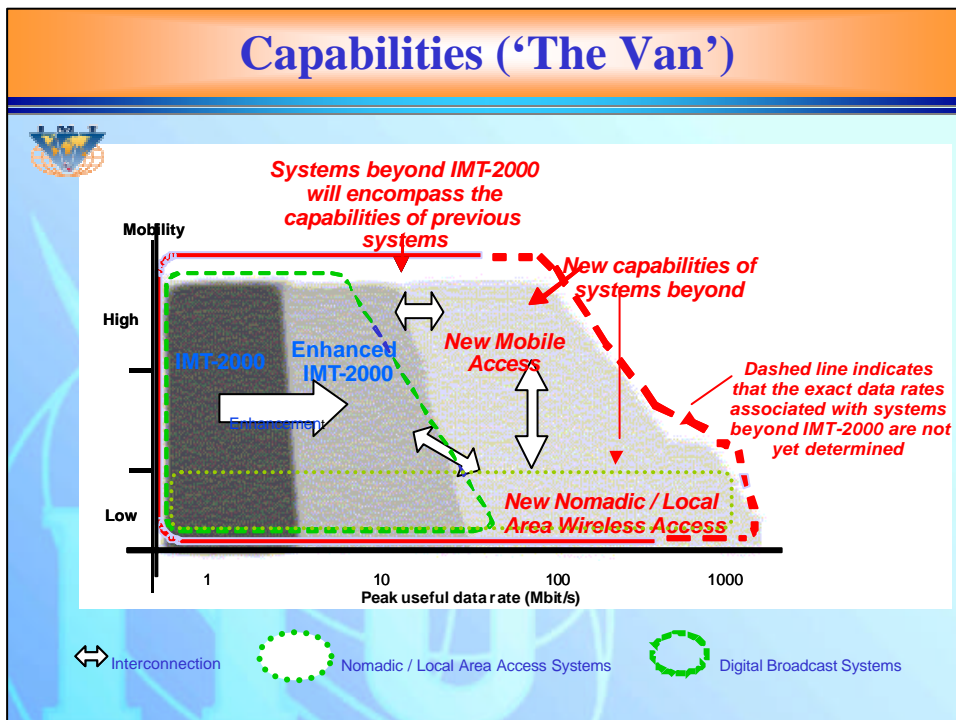
## IMT-2000 Standards Development



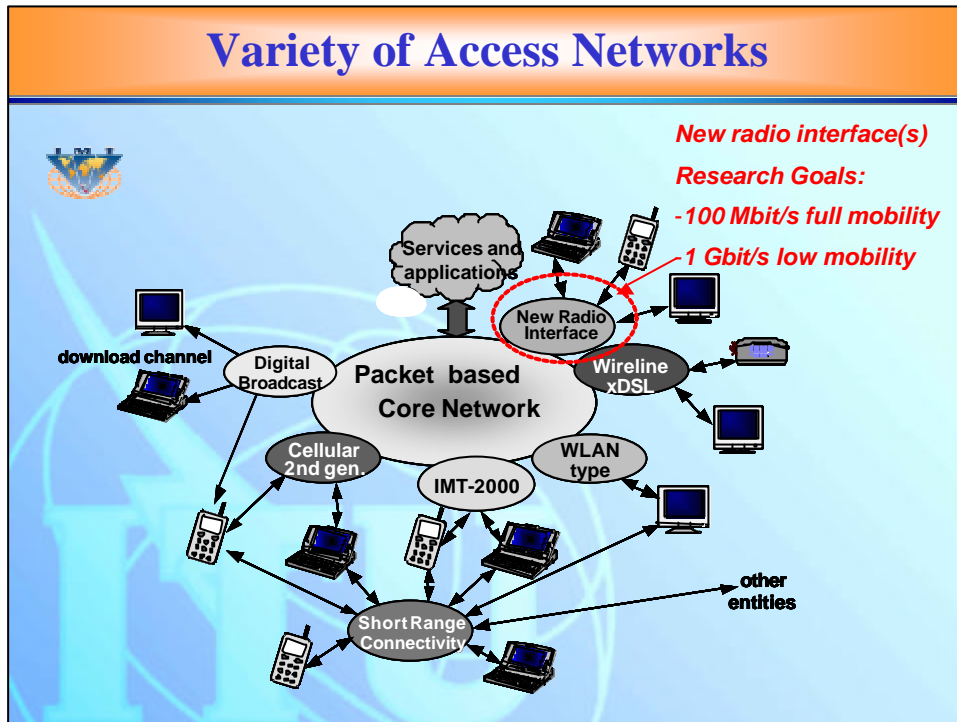
## Radio Access - Three Main Phases



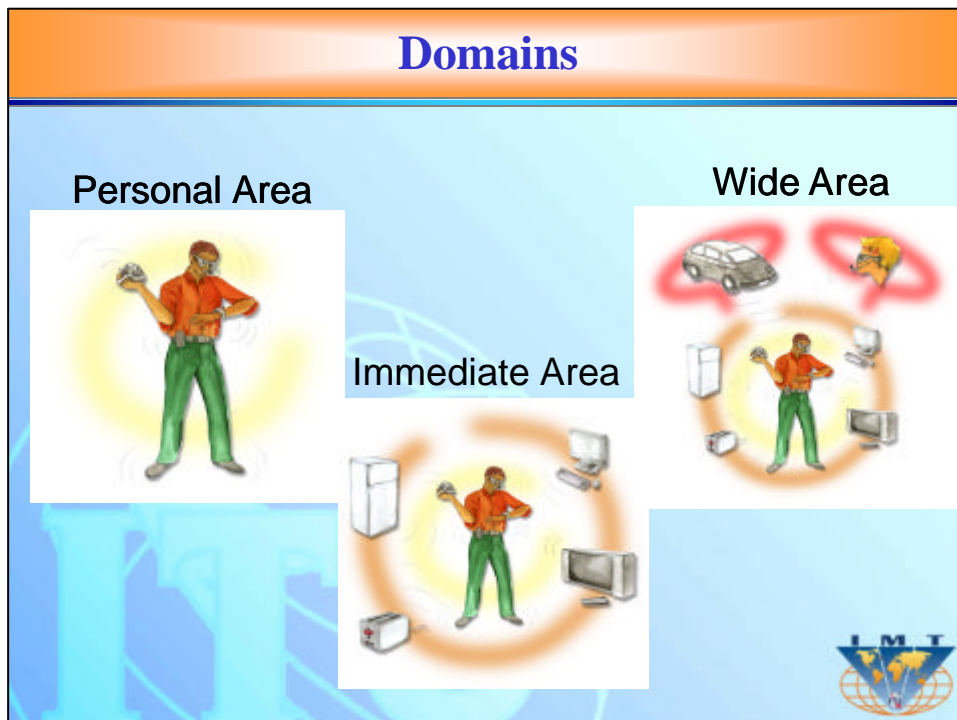
## Capabilities ('The Van')



## Variety of Access Networks



## Domains



## Fusion

### Recommendation ITU-R M.1645

"Systems beyond IMT-2000 will be realized by functional fusion of existing, enhanced and newly developed elements of IMT-2000, nomadic wireless access systems and other wireless systems, with high commonality and seamless interworking"



## Spectrum

- Needed to plan use of spectrum already identified
  - Recommendation ITU-R M.1036  
806-960, 1710-2025, 2110-2200 and 2500-2690 MHz
- Needed to secure appropriate WRC-07 agenda item to address future requirements
  - Recommendation ITU-R M.1645
  - Resolution 802 (WRC-03)
  - Resolution 228 (Rev.WRC-03)



## Resolution 802 (WRC-03)

2007 World Radiocommunication Conference

Agenda item 1.4

“to consider frequency-related matters for the future development of IMT-2000 and systems beyond IMT-2000, taking into account the results of ITU-R studies in accordance with Resolution 228 (Rev.WRC-03)”



## Resolution 228 (Rev.WRC-03)

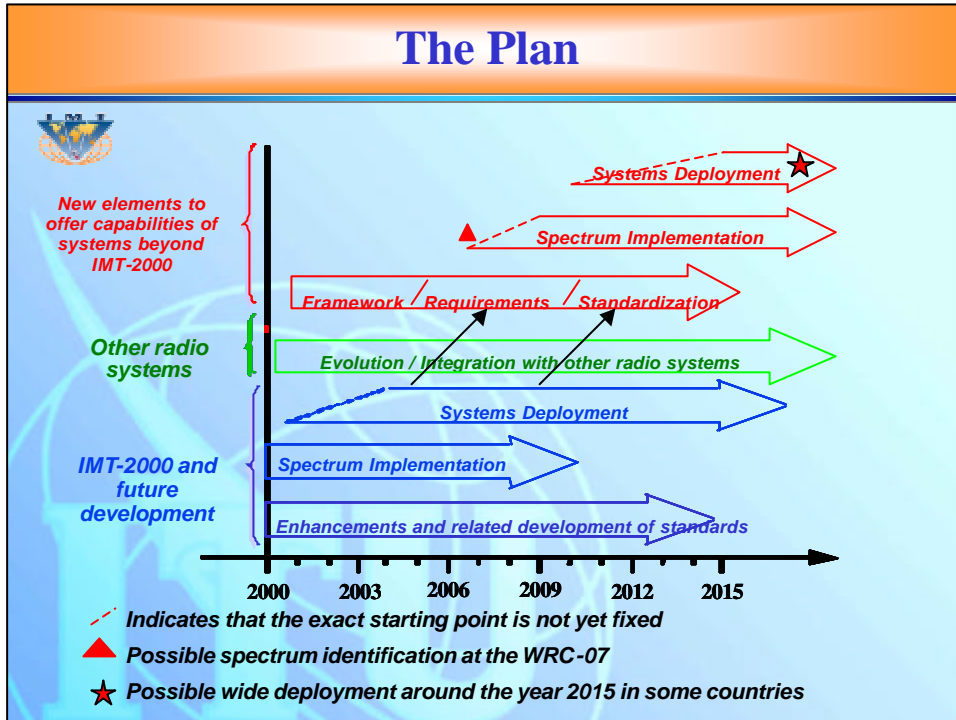
*resolves*

- 1 to further study technical and operational issues ...;
- 2 to report to WRC-07 on the spectrum requirements and potential frequency ranges ...;
- 3 to conduct regulatory and technical studies on the usage of frequencies below those identified for IMT-2000 ...;
- 4 to take into consideration the particular needs of developing countries including use of the satellite component of IMT-2000 ...;
- 5 to include sharing and compatibility studies with services already having allocations in potential spectrum ...;
- 6 that WRC-07 should consider frequency-related matters for the future development of IMT-2000 and systems beyond IMT-2000

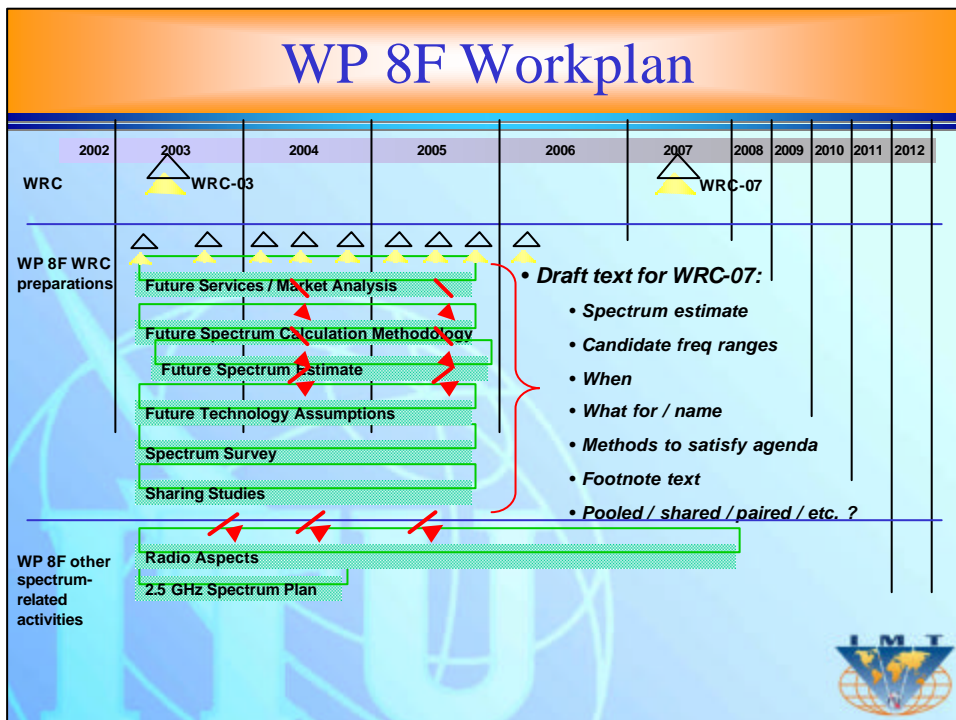




# The Plan



# WP 8F Workplan



## WP 8F web page

<http://www.itu.int/ITU-R/study-groups/rsg8/rwp8f/index.asp>

The screenshot shows the ITU-R website for Working Party 8F. The page is titled "Working Party 8F - IMT-2000 and systems beyond IMT-2000". It features a left-hand navigation menu with categories like "Office of the Secretary General", "Radio-communication (ITU-R)", "Telecommunication Standardization (ITU-T)", "Telecommunication Development (ITU-D)", "TELECOMMUNICATIONS FORUM", and "Membership". The main content area is divided into several sections: "Research activities" (with a "Focus areas" link), "Other IMT-2000 activities at ITU" (listing "Telecommunication Development (ITU-D Question 18/2)", "Telecommunication Standardization (ITU-T Special Study Group)", and "Research and Analysis (SPII), General Secretariat"), "Electronic facilities" (listing "ITU-R electronic facilities", "Working lists - FTP server", and "Contributions submission: rsg8@itu.int"), "Documents" (listing "Chairman's Report: 10th meeting", "Contributions - Archives", "Information documents", and "GCS updates"), "Next meeting" (listing "ITU-R meeting schedule" and "Invitation to next WP 8F meeting: 8-16 October 2003 (Edinburgh)"), and "Structure and workplan" (listing "WP 8F structure and workplan").

## Summary

- A coordinated process for standards development is proven (ITU, PPs, SDOs, Forums, etc.)
- Flexibility is “designed in” from the outset
- Enhancements already being standardised and will evolve considerably over next 10-15 years – open and market led
- Relationship with other radio systems will take place on a market led basis – regulatory considerations
- New radio interface(s) are expected to be required sometime between 2010-2015
- Spectrum aspects will be considered at WRC-07





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**Thank you**

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