IMT-Advanced Summary

Jose Puthenkulam
(jose.p.puthenkulam@intel.com)
Brian Kiernan
(brian.kiernan@interdigital.com)

Introduction

- IMT-Advanced (Systems beyond IMT-2000) visualizes a hierarchy of interconnected access systems
- Envisions New Radio Interfaces for Mobile and Local Area Access
- New Radio interfaces are expected to target 100 M bits/s in high mobility scenarios and up to 1 G bits/s in Low mobility scenarios.
- IEEE 802 possibilities in IMT-Advanced

IMT-Advanced Vision of Complementary Interconnected Access Systems

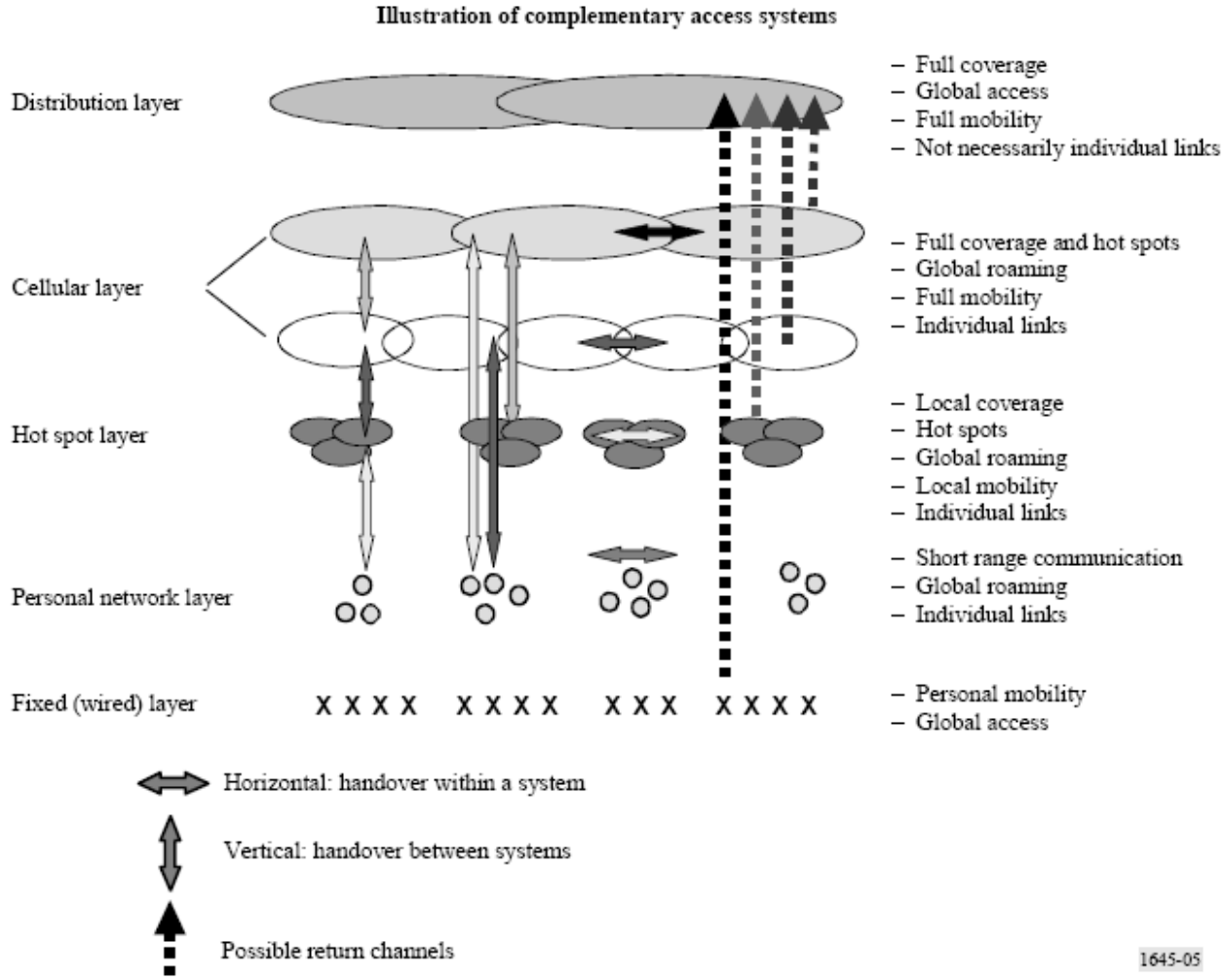
Broadcast Systems

Mobile Systems

Local Area Systems

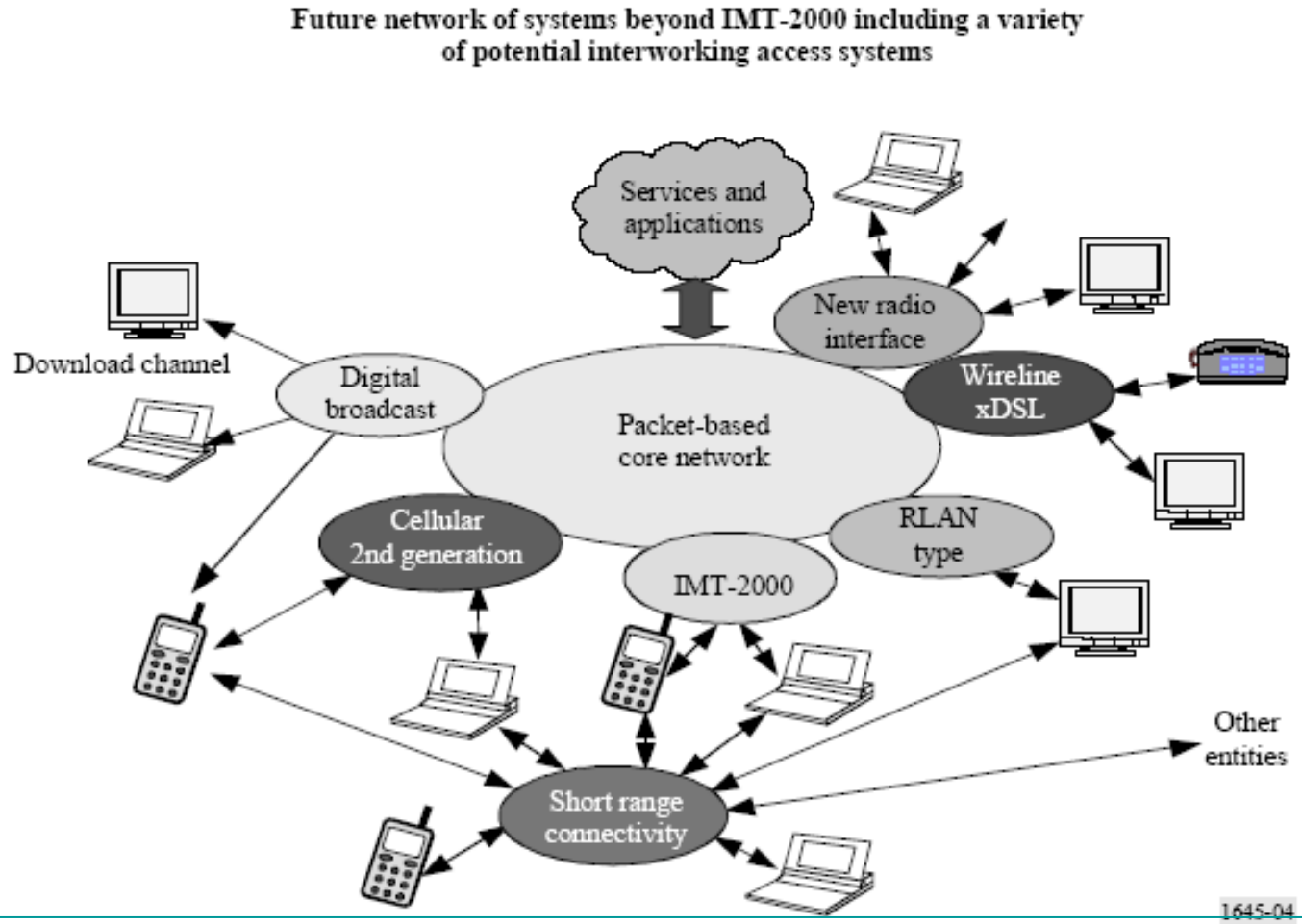
Personal Area Systems

Fixed Networks



IMT-Advanced visualizes seamless inter-working and handover between access systems

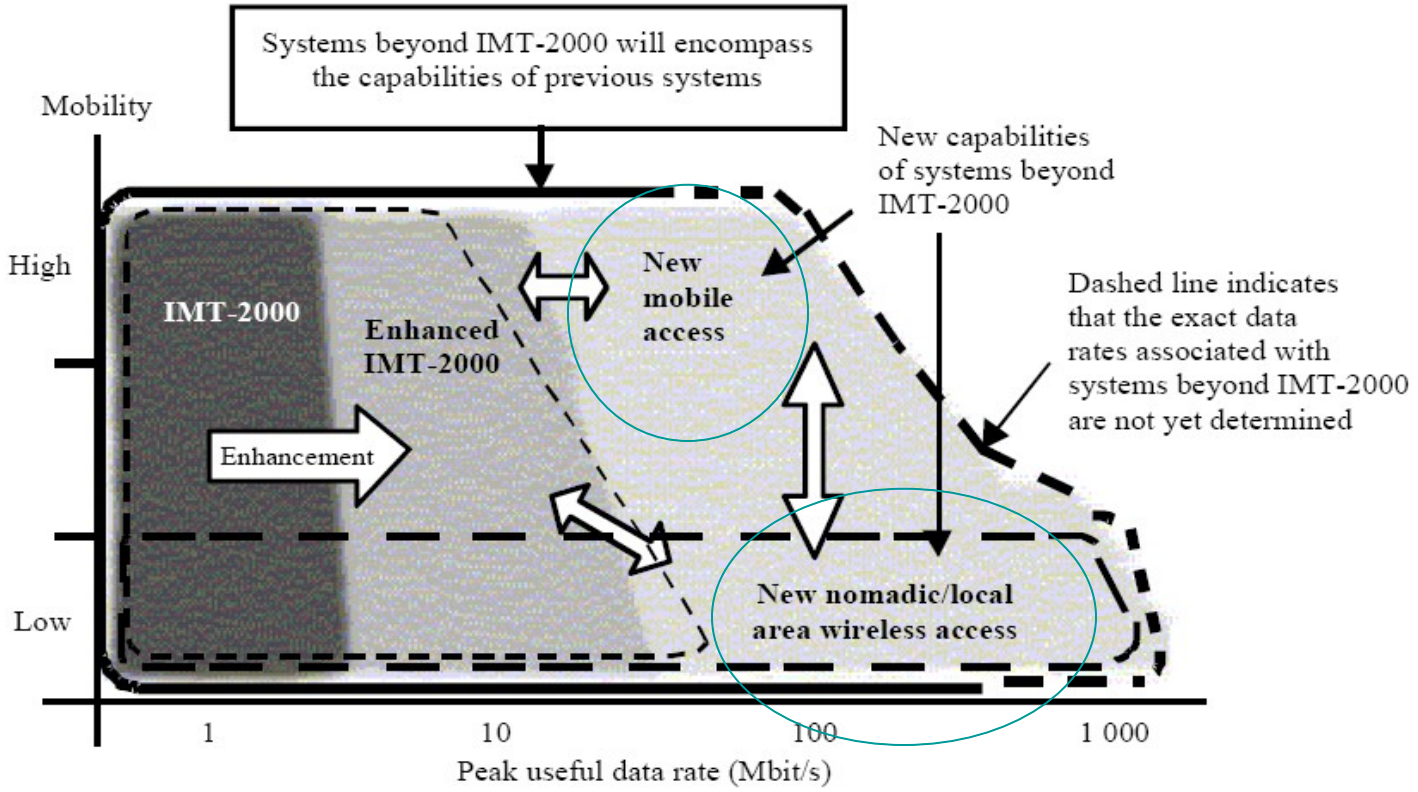
New Radio Interface(s) within IMT-Advanced



New radio interface technologies need to work well with existing access systems

Source: ITU-R Recommendation M.1645

Capabilities of IMT-Advanced Systems



Denotes interconnection between systems via networks, which allows flexible use in any environment without making users aware of constituent systems

Nomadic/local area access systems

Digital broadcast systems

Source: ITU-R Recommendation M.1645

IEEE 802 possibilities in IMT-Advanced

- IEEE 802 is working on multiple access technologies that are relevant for IMT-Advanced
- Individual WGs could develop proposals to address different aspects of the IMT-Advanced Vision
- IEEE 802 should provide a harmonized view for seamless interworking between our 802 and other access technologies