

IMT-Advanced Summary

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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

Illustration of complementary access systems

Broadcast Systems

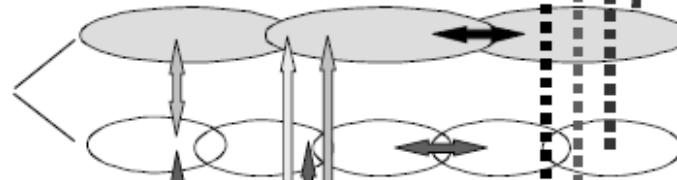
Distribution layer



- Full coverage
- Global access
- Full mobility
- Not necessarily individual links

Mobile Systems

Cellular layer



- Full coverage and hot spots
- Global roaming
- Full mobility
- Individual links

Local Area Systems

Hot spot layer



- Local coverage
- Hot spots
- Global roaming
- Local mobility
- Individual links

Personal Area Systems

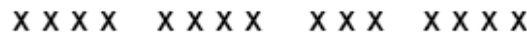
Personal network layer



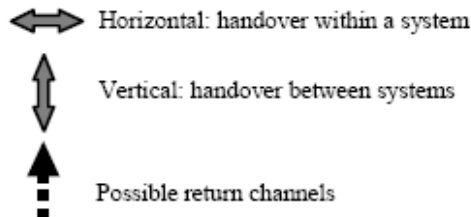
- Short range communication
- Global roaming
- Individual links

Fixed Networks

Fixed (wired) layer



- Personal mobility
- Global access



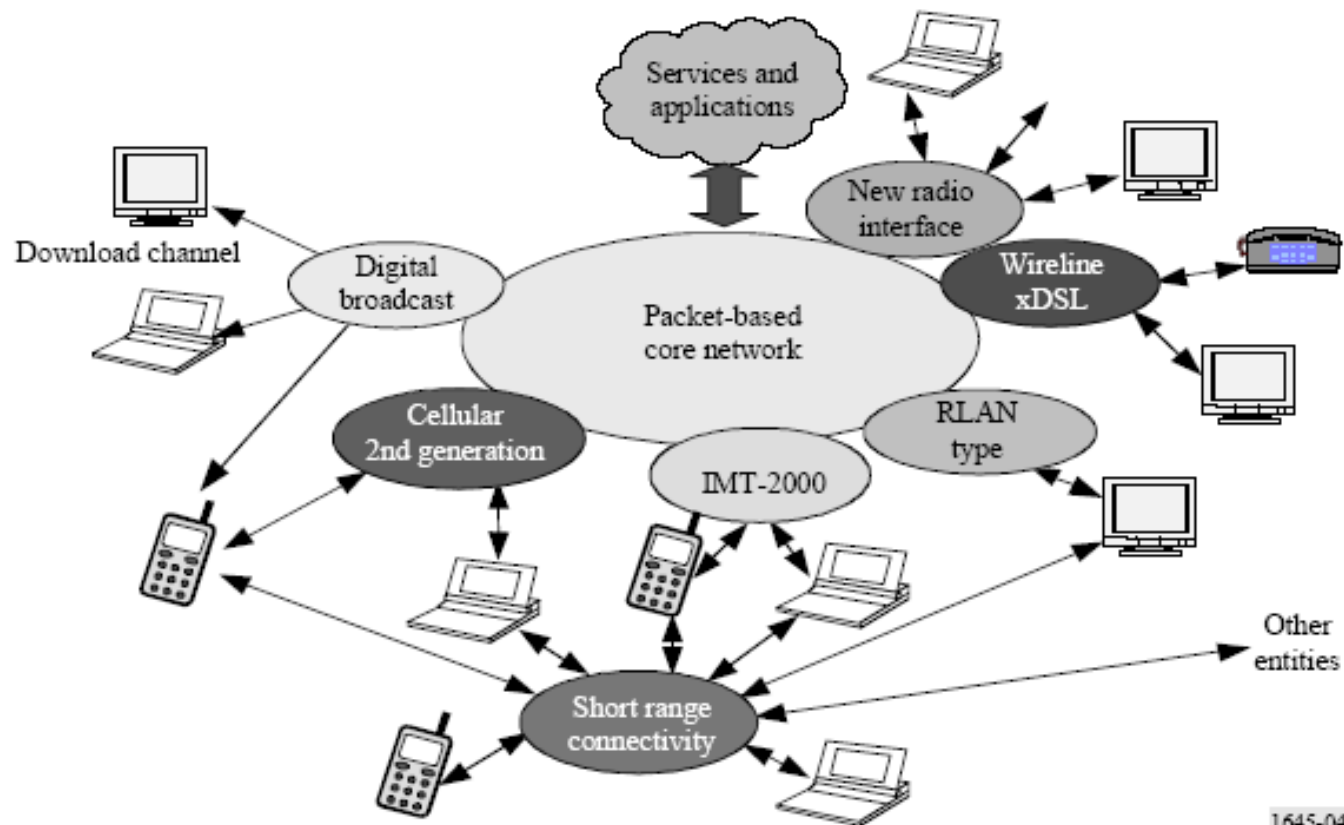
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IMT-Advanced visualizes seamless inter-working and handover between access systems

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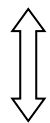
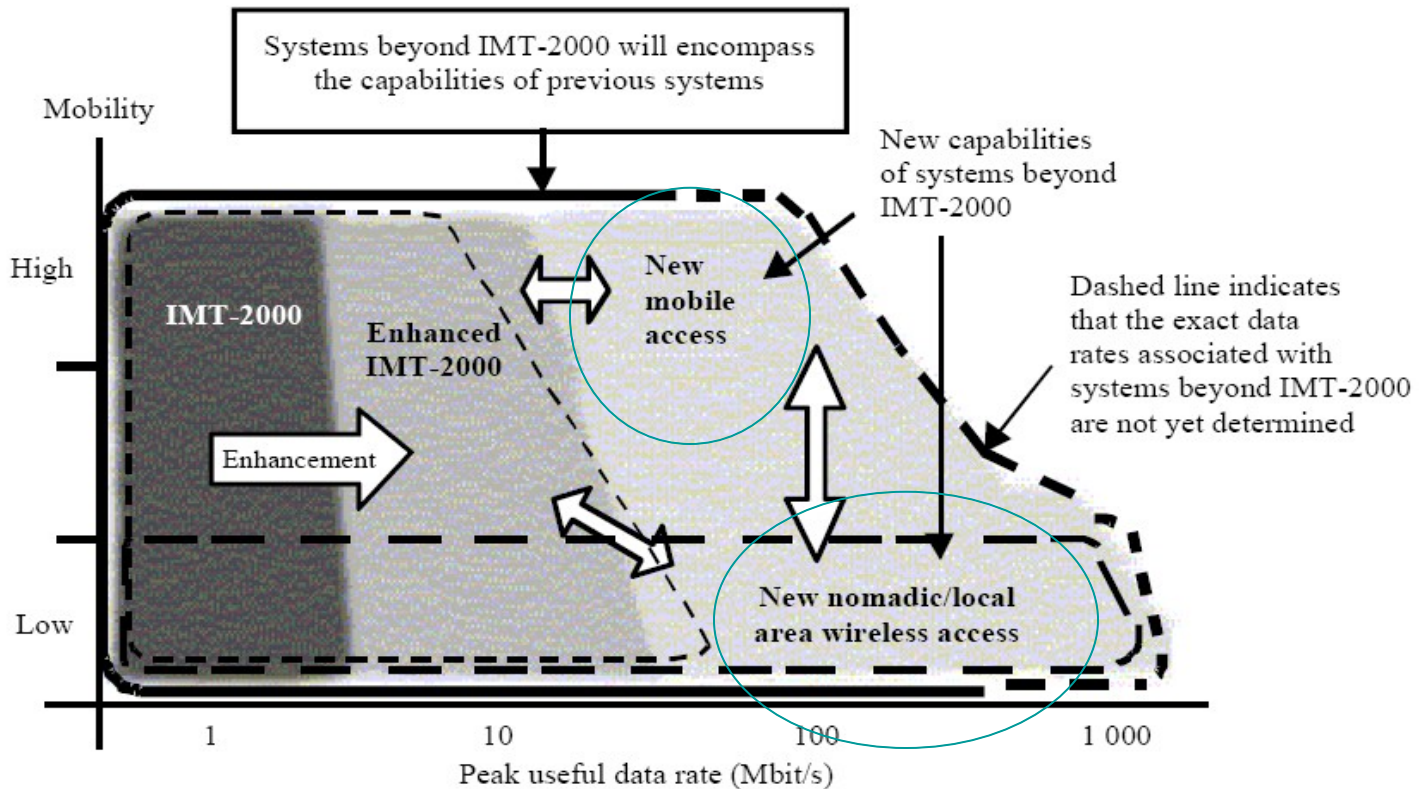
New Radio Interface(s) within IMT-Advanced

Future network of systems beyond IMT-2000 including a variety of potential interworking access systems



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

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

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