

### The VICOM Project

www.vicom-project.it

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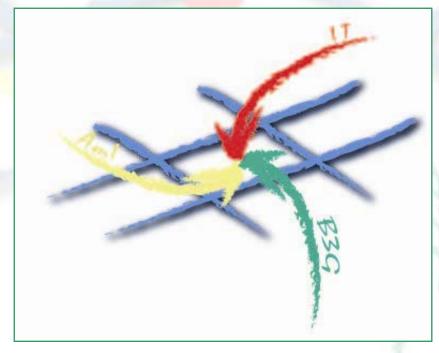
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#### The VICOM Challenge

"To integrate mobile communications with improved audio, video and sensing interface technologies aiming at forms of person-to-person and person-to-computer interactions at a distance, sensibly enhancing the sense of presence"

Ambient Intelligence



Immersive Telepresence

Mobility Beyond 3G





### Project Goals

Integrated Test-Beds
Distributed within the
"VICEX" Network
of Laboratories

Mobility in Immersive

**Environments** 

Virtual
Immersive
Learning

E SOUND BOOKS

Standardize interface characteristics

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**COM Test-bed Philosophy** MIE **VIL** μ testbed #3 μ testbed #2 u testbed #1 μ testbed #2 Context awareness

VR distribution in CSCW applications μ testbed #3 Technologies integration Bluetooth, IEEE 802.11, Sensors, UMTS, Wired IP MIE u testbed #1 ...long term view

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# Mobility in Immersive Environments (MIE)

- Peer-to-peer interaction among devices
- Multi-modal interaction with the environment
  - Context awareness
    - Multi-technology mobile middleware platforms
      - Ad-Hoc and overlay mobile networking
        - Fixed and wireless network transport protocols
          - QoS solutions
            - Device reconfigurability

MIE
Technologies
and
Functionalities



# Virtual Immersive Learning (VIL)

Real-time interaction in virtual environments

• Sharing of object in the net via perceptual interfaces

VIL
Technologies
and
Functionalities

- Virtual assistant technologies
- 3D rendering real-time adaptation
- Virtual environments for a remote teaching session