The VICOM Project

www.vicom-project.it

Prof. Francesco Vatalaro
University of Rome “Tor Vergata”, Italy
VICOM Project Principal Investigator
vatalaro@uniroma2.it

IST-FET Brainstorming “Presence 2” Brussels, November 13th, 2003
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”
Project Goals

Integrated Test-Beds Distributed within the “VICEX” Network of Laboratories

Mobility in Immersive Environments

Standardize interface characteristics

Virtual Immersive Learning

VICOM project

Virtual Immersive COMmunications
VICOM Test-bed Philosophy

Context awareness
VR distribution in CSCW applications

Technologies integration
Bluetooth, IEEE 802.11, Sensors, UMTS, Wired IP

Services platform

Middleware

Network technologies

…long term view

VICOM project

Virtual Immersive COMmunications
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

VICOM project
Virtual Immersive COMmunications
Virtual Immersive Learning (VIL)

- Real-time interaction in virtual environments
- Sharing of object in the net via perceptual interfaces
  - Virtual assistant technologies
  - 3D rendering real-time adaptation
- Virtual environments for a remote teaching session

VICOM project
Virtual Immersive COMmunications