



Introduction to MUSE II



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Objectives

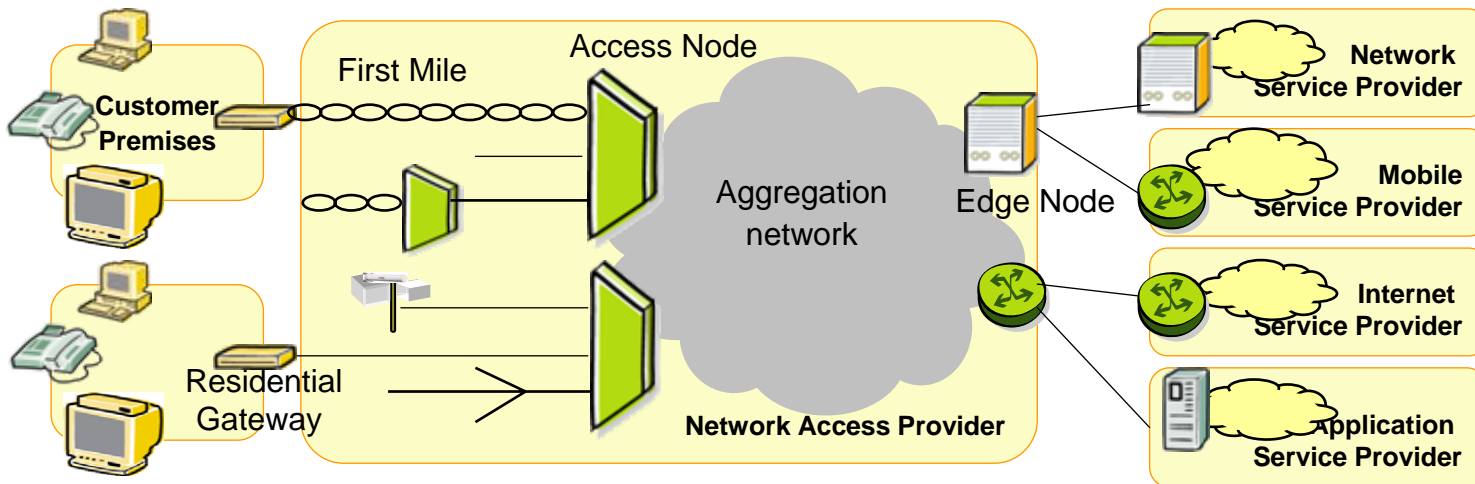


Phase I: 2004-2005

- ✓ Ethernet/IP access architecture
- ✓ From end-user terminals to edge
- ✓ Multi-Service capability
- ✓ Open, multi-provider environment
- ✓ Low cost first mile solutions

Phase II: 2006-2007

- ⇒ Mature the access architecture
- ⇒ Embed MM service enablers
- ⇒ Prepare for FMC
- ⇒ Explore novel first mile concepts
- ⇒ Influence standardisation



Issues when using Ethernet in Access



> Ethernet LAN (trusted environment)

> Ethernet in Access (public network)

> No authentication



> AAA

> Configurable MAC@
• Conflicts, spoofing



> Anti-spoofing mechanism

> Bridge learning - Broadcast of some initialisation messages (ARP, DHCP, PPPoE)
• DOS attacks
• Confidential info to other users or competing providers



> Secure and scalable connectivity models
• Model 1 (L2 forwarding)
• Model 2 (L3 forwarding)

> No QoS



> QoS framework

Partners



Phase I: 2004-2005

Phase II: 2006-2007

36 partners -100 PY/year



System vendors

ALCATEL

Lucent Technologies
Bell Labs Innovations

ERICSSON

SIEMENS

THOMSON
images & beyond

Component vendors

Infineon
technologies

ST

(*)

(*)

Introduction to MUSE — 4

Operators

BT

Telefonica

france telecom

TeliaSonera

TNO

tp (**)

P T

TELECOM
ITALIA

SME

Aarhus BB society(*)

robotiker
tecnalia

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Research Inst. & Universities

IBBT

Inria

TU Eindhoven

Budapest University (BUTE)

ICCS/NTUA

HHI

Lund Institute of Technology (LTH)

ACREO

Univ. Carlos III de Madrid

University of Essex

(*) Only in phase I

(**) Only in phase II

ALCATEL

MUSE Lab trials Cross Subproject Interconnection



SPC at TNO Delft



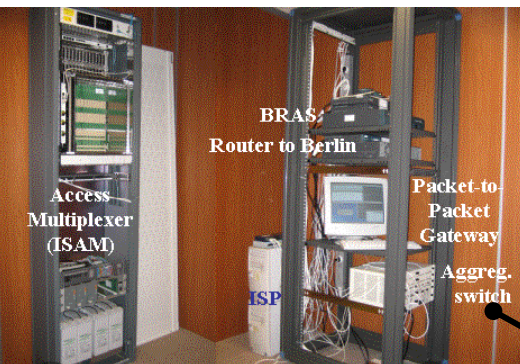
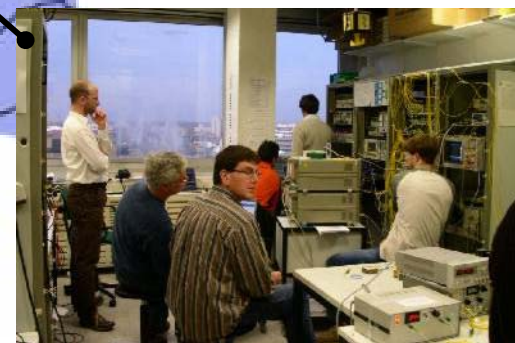
SPC at ACREO Kista



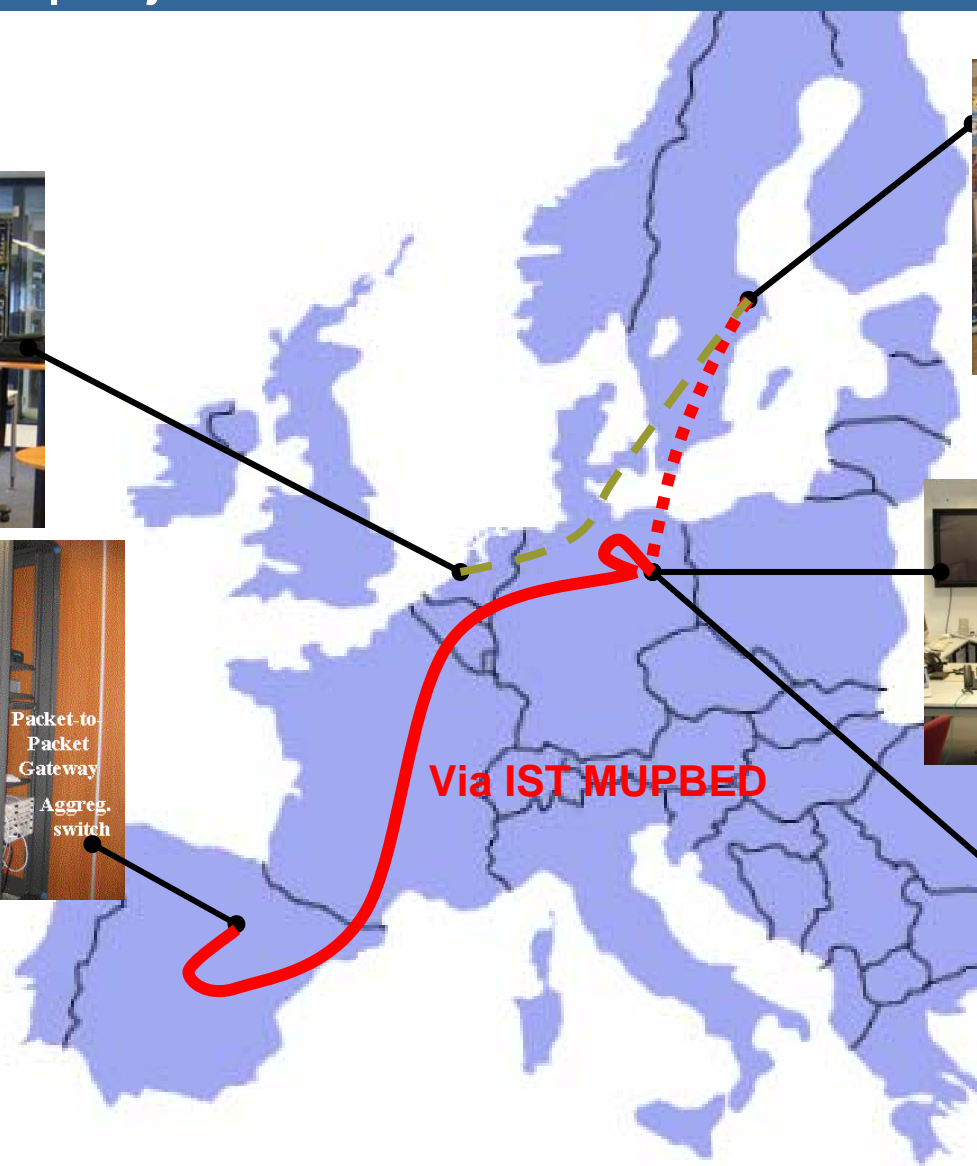
SPB at DT Berlin



SPD/E at HHI Berlin



SPB at TID Huesca



Via IST MUPBED