HIDENETS --

Highly DEpendable ip-based NETworks and Services

Project Overview

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HIDENETS Consortium

HIDENETS data

- IST 026979 "Highly DEpendable ip-based NETworks and Services" – HIDENETS
- Proposal for a STREP submitted at the 4th call of the VI Framework (March 2005)
- Approved Oct. 2005
- Project started January 2006
- Duration 36 months
- Cost 3.59 Meuro -- EC Contribution 2.5 Meuro
- Web page: http://www.hidenets.aau.dk/

HIDENETS Goals

- Develop and analyze end-to-end resilience solutions
 - for scalable distributed applications and mobility aware services
 - in ubiquitous communication scenarios
 - Typical use-case: car2car communication with server-based infrastructure
 - assuming highly dynamic, unreliable communication infrastructures
- Expected results:

architectural and design solutions, tools for development and analysis for end-to-end system level resilience and dependability based on standard off-the-shelf components in wireless communication networks and infrastructures

- Measures of success
 - proof-of-concept prototype, analytic and simulation models
 - Training material and contributions to standardization organizations

HIDENETS Scenarios

- Challenges/properties of HIDENETS service provisioning
 - Dynamically changing communication characteristics in ad-hoc domain and in connection to infra-structure services
 - Off-the-shelf, standard systems and components in both domains
 - Services with high dependability and scalability requirements
- → Selected use-case of ad-hoc car-to-car communication with connectivity to infra-structure services

HIDENETS solutions also applicable in other, related scenarios, including Personal Area Networks and cellular networks with ad-hoc coverage extension.



Ad hoc domain



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Total nine partners from eight different countries

Industry: Application and Servers Carmeq (GER), FSC (GER), WMC (NL), Telenor (NO) FSC Academia/research institutions: Carmeg AAU (DK), BME (HU), LAAS (FR), Uni-Fi (IT), FCUL (PT) BME Covering the three areas AAU **Distributed Systems** LAAS WMC **Communications** Distributed **Applications and Servers** ISTI FCUL Telenor Additional involvement of other companies via advisory council ISTI → Uni-Fi

Advisory Council

Additional 6 organizations involved

Role:

- Feedback on results and research directions \rightarrow quality assurance Stronger exploitation and dissemination
- Fine-tuning & adjustment of strategic project directions

Members:

- **Mobile Equipment Vendors:**
- Nokia (Francis Tam), Siemens COMMN (Robert Seidl)
- **Mobile Operators:** France Telecom (Chidung Lac)
- Automotive Industry Renault (Gerard Segarra), Intecs (Paolo Coppola)

Car-2-car communication consortium BMW (Hans-Joerg Voegel)

Project Overview and Workpackages

Structuring of Work



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