The GEN6 Workshop on IPv6 Implementation in Governments
(Tuesday, 7th of May 2013 in the afternoon)

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Agenda

14:00 – 14:10	Welcome and introduction to Gen6
14:10 – 14.35	**Title**: IPv6 transition in practice – workbench report **Speaker / Organisation**: Gerold Gruber / Martin Krengel (Citkomm)
14:35 – 15:00	**Title**: Improving Energy Efficiency in School Networks with IPv6 **Speaker / Organisation**: Anastasios Zafeiropoulos (Greek Research & Technology Network - GRNET)
15:00 – 15:15	Break
15:15 – 15:40	**Title**: IPv6 Readiness & Public Administration in Europe **Speaker / Organisation**: Jiří Průša / CZ.NIC Association
15:40 – 16:05	**Title**: Challenges in using IPv6 in Cross-border scenarios in GEN6 **Speaker / Organisation**: Antonio Skarmeta (University of Murcia/Spain)
16:05 – 16:15	Break
16:15 – 16:40	**Title**: 6inACTION – pilot presentation **Speaker / Organisation**: Janez Sterle, Mojca Volk (ULFE)
16:40 – 17:05	**Title**: IPv6 in Cross-border Emergencies **Speaker / Organisation**: Ralf Hoben (University of Luxembourg, SnT)

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Title: IPv6 transition in practice – workbench report

Speaker / Organisation: Gerold Gruber / Martin Krengel (Citkomm)

Abstract: Citkomm is a data centre operator. As part of the GEN6 project the different areas of the infrastructure will be enabled for IPv6. This touches local networks; application server networks and data centre backbone as well as the Internet connection, WAN networks or secured networks to other organisations. The contributors will show best practice and bad practices as experiences of the transition activities performed until now in the project. As a report directly from the workbench practical examples will be demonstrated accompanying the presentation.

Title: IPv6 Readiness & Public Administration in Europe

Speaker / Organisation: Jiří Průša / CZ.NIC Association

Abstract: CZ.NIC is a national domain registry for .cz with a various activities including IPv6 research and deployment. Within the GEN6 project, CZ.NIC leads an activity focused on international benchmarking of IPv6 readiness by public administration. The presentation involves the results of IPv6 benchmarking in Europe and preliminary outcomes. This benchmarking study has analysed IPv6 support by more than 2 300 domains in nine countries. The presentation also introduces the IPv6 strategy and policy documents in the Czech Republic including IPv6 state of play in the public administration.

Title: Improving Energy Efficiency in School Networks with IPv6

Speaker / Organisation: Anastasios Zafeiropoulos (Greek Research & Technology Network - GRNET)

Abstract: The talk is related to the Greek IPv6 pilot implementation -in the framework of the GEN6 project- that aims to demonstrate that IPv6 could become the leveraging technology for enhancing existing services or providing new services to the end users. It investigates the benefits of establishing an advanced metering infrastructure over IPv6, and provides insights about the benefits of building IPv6 services. Through the installation of IPv6 enabled smart meters in 50 public schools in Greece, the target is to influence the behavior of the local school communities by raising their energy awareness while in parallel increasing the awareness of the students for the advantages of applying new networking technologies. Based on the pilot results, a signal has to be provided to European stakeholders that IPv6 technology can be a "green" enabler. The architecture of the overall deployment, the challenges faced for deploying an end-to-end IPv6 infrastructure, the methodology followed for extracting energy-aware profiles for each school and the energy saving achieved will be presented, while real time connectivity to the IPv6 enabled smart meters will be demonstrated.

Title: Challenges in using IPv6 in Cross-border scenarios in GEN6

Speaker / Organisation: Antonio Skarmeta (University of Murcia/Spain)

Abstract: This presentation will describe the different challenges and possible IPv6 drivers detected by the GEN6 project in the definition of cross-border scenarios and services. A description of the usage of IPv6 in sensors integration and mobility services defined within the GEN6 first analysis will be described and how this will be interact with the safety use case. Also some initial IPv6 interconnection of the national IPv6 network will be presented.

Title: 6inACTION – pilot presentation

Speaker / Organisation: Janez Sterle, Mojca Volk (ULFE)

Abstract: 6inACTION is a Slovenian IPv6 pilot for Advanced Emergency Response Communication System (A-ERCS). A-ERCS represents a vision of a convergent, reliable and smart communication system designed specifically for professional use in emergency situations. Being part of the GEN6 project, it represents a unique effort of IPv6 deployment and uptake in governmental environment for a highly specialized target user group, i.e., a fire fighter unit utilizing communications on field during an intervention. The talk will show a novel approach of using advanced network functionalities (i.e., NEMO, IPSec, DSMIPv6, user and sensor tracking functionalities, SSM multicast) in professional communications, enabling commercial and professional infrastructure convergence, network, host and sensor mobility, and system intelligence for automatic network planning and deployment capabilities. It will demonstrate also integration of network and sensor capabilities for "IoT-empowered emergency situations". 6inACTION system functionalities and IoT services will be presented using a live demo environment.

Title: IPv6 in Cross-border Emergencies

Speaker / Organisation: Ralf Hoben (University of Luxembourg, SnT)

Abstract: In the course of previous FP7 projects (U2010, Secricom) a framework for the integration of heterogeneous Professional Mobile Radio (PMR) solutions was developed, which enabled the interconnection of public protection and disaster relief organisations' communication through the use of gateways.

As a further step, the use of IPv6 in public safety networks and services could substantially improve interoperability and support the use of end-to-end security mechanisms, which is especially crucial for cross-border public safety missions. Public safety is not just a national matter but a Europe-wide and a world-wide one, and operation management requires involvement and coordination of (different) public safety organizations from different countries.

In the GEN6 project we will show that the main requirements (as represented by the CAIN acronym: confidentiality, availability and authentication, integrity and non-repudiation) of the professional communication sector, so far governed by proprietary solutions as e.g. TETRA, can be fulfilled by an IPv6 enabled client, which is used to link existing emergency communication systems to enable cross border use.

In this talk we will describe how IPv6 technologies can be used to bridge existing communication technology disparities, while at same time preserving the requirements mentioned before.