

# IPv6 Dissemination and Exploitation – 6DISS

2<sup>nd</sup> South East Europe 6DISS Workshop Plovdiv, Bulgaria 27-29 June 2007

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### **Objectives**

- To transfer knowledge on Internet deployment and evolution to NRENs, Universities, commercial organisations, ISPs, governments and regulators in:
  - Asia Pacific Region
  - Africa
  - South Eastern Europe
  - Mediterranean partner countries
  - South and Central America
  - Newly-Independent States
  - The Caribbean
- To exchange deployment experiences with India and China.





# **Project Partners**

Type of project: Specific Service Action

Partners:





















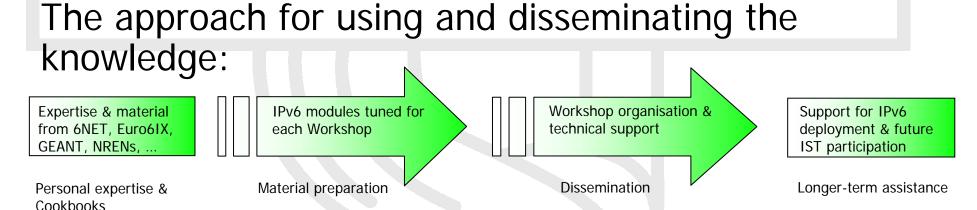
Start date: 1st April 2005

• Duration: 30 months





# Technical Approach (1)



The set of dissemination capabilities (the "toolkit") available from the project comprises:

- Workshops and associated presentation material
- E-learning package
- IPv6 Technical Training facilities
- Training the Trainers manual
- Tiger Team services
- Website
- Conference presentations and journal publications





- Workshops (slideware + access to remote labs)
- E-learning package
- Training the Trainers manual
- IPv6 Technical Training course
- Tiger Team
- Website





# Workshop material

Module Topic	Partner responsible	Module Topic	Partner responsible
6DISS presentation	Martel	IPv6 DNS	FCCN
IPv6 Introduction	RENATER	IPv6 Routing protocols	FCCN
IPv6 Protocol	RENATER	RPSLng	FCCN
IPv6 Addressing	RENATER	IPv6 Security	UCL
IPv6 Addressing case studies	HUNGARNET/ RENATER	IPv6 Mobility	Cisco
IPv6 Associated protocols	RENATER	IPv6 - IPv4 Coexistence	Soton-ECS
IPv6 Network Management	RENATER	Deployment scenarios	HUNGARNET





# Workshop material

Module Topic	Partner responsible	Module Topic	Partner responsible
IPv6 Multicast	RENATER	IPv6 Applications	UCL
M6Bone	RENATER	Equipment configuration	HUNGARNET
IPv6 Autoconfiguration	FCCN	IPv6 QoS	GRNET





### **6DISS Testbeds**

Laboratories (in Paris and Brussels ) are available via remote access.

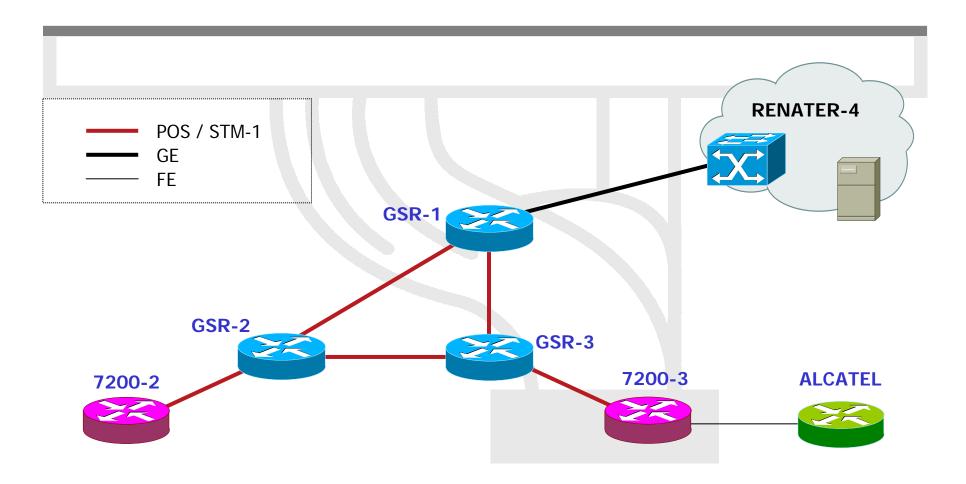
Booking and usage procedures...

- http://www.6diss.org/labs
- labs@6diss.org





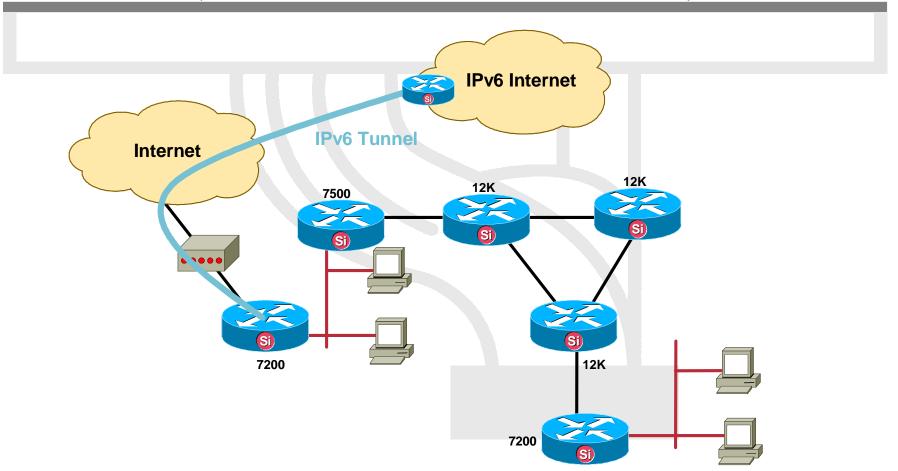
### **Paris Lab**







# SEE 6DISS Lab (former Brussels Lab)







- Workshops (slideware + access to remote labs)
- E-learning package (www.6diss.org/e-learning)
- Training the Trainers manual
- IPv6 Technical Training course
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# E-learning package

### Available from anywhere - http://www.6diss.org/e-learning/

#### Attractive content

well-balanced combination of audio, graphical and animation components

#### Effectiveness is ensured through:

- an integrated instructional design, including a modular structure
- interactivity
- simulation and
- individual learning flexibility

#### The e-learning package is used:

- as a "teaser" for the workshops
- for assessing the suitability of participants for the workshops
- for training the trainers





- Workshops (slideware + access to remote labs)
- E-learning package (www.6diss.org/e-learning)
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# **Training the Trainers Manual**

Due to time and budget constraints, WP1 cannot commit to visit each region more than once, but we can train other people to make the workshops.

The "Training the Trainers" course and manual is intended for persons who are not fully familiar with all the aspects of IPv6 covered by the 6DISS material. The attendees of these courses get the full set of 6DISS presentations, together with supplementary information. They can access the labs in Brussels and Paris, and support will be available for answering specific technical questions. The manual (Deliverable D11) comprises:

- · Guidelines regarding the fundamentals of teaching
- Guidelines on how to organize a workshop on IPv6
- Information on where to find the latest workshop module material
- An instructors' guide to accompany each module
- Information on the e-learning package
- Information about the Tiger Team
- The feedback questionnaire
- Other material available from 6DISS





- Workshops (slideware + access to remote labs)
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# **IPv6 Technical Training Course**

Within the 6NET project, two hands-on technical training courses were given for engineers that would have to work with IPv6 equipment. These courses were extremely successful, and the material (supplemented by new inputs) is made available for 6DISS.

These courses enable the trained persons to configure and operate IPv6 routers and host equipment.

The course can be oriented towards whatever specific training is required (e.g. deployment engineers, maintenance engineers, NOC personnel).

The course content is documented in Deliverable D12.

Support is also available via the Tiger Team for answering specific technical questions.





- Workshops (slideware + access to remote labs)
- E-learning package (www.6diss.org/e-learning)
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# **Tiger Team**

The "Tiger Team" comprises experts within the project, willing to answer questions via e-mail. It operates as an open *help desk* service (helpdesk@6diss.org), concerning aspects such as:

- state-of-the-art, eg:
  - IPv6 IETF RFCs that are released or still in progress
  - IPv6 deployments
  - IPv6 applications
- equipment configuration
- hardware and software requirements
- transition scenarios
- management and monitoring tools





# Tiger Team (2)

- Maintains the www.6journal.org Website (adding new presentations and papers)
- Interfaces to and assists National IPv6 Task Forces
- Creates links to interesting IPv6 applications, IPv6 resources, and national resources
- References are also provided to FAQs





- Workshops (slideware + access to remote labs)
- E-learning package (www.6diss.org/e-learning)
- Training the Trainers course and manual
- IPv6 Technical Training course
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# Website (www.6diss.org)

#### Public Area:

- The public area includes all the presentations that have been made at the workshops and in conferences, reports from the workshops, deliverables, press releases, news, etc.
- A calendar is maintained of upcoming events especially related to IPv6, and the upcoming 6DISS workshops.
- Workshop hosts can download the information they need regarding the organisational details.
- The link to the e-learning package is visible from the homepage.
- Links are continuously being established to related sites.
- Statistics are collected concerning the number of visits and downloads.





### **6DISS** activities in SEE

- Two IPv6 training Workshops organised
  - Kopaonic (Serbia), 2006
  - Plovdiv (Bulgaria), 2007
  - More than 50 participants from SEE counties Participation from NRENs, Universities and ISPs.
- Trainer of Trainers
- 6DISS IPv6 Lab in SEE
  - Equipment donated by Cisco
  - Administration by GRNET (in the context of 6DISS and SEEREN projects)
  - Hosted & Supported by BREN
  - Distributed Management by SEE NOCs
  - Planed to be operational by end of August
- Cooperation with SEEREN and other regional projects
  - Design and implement IPv6 connectivity in SEEREN1/2
  - Common project meetings, support networking IPv6 activities, etc
- Publication
  - Newsletters, mailing lists





# **Questions?**

Thanks for your attention!

#### **Contact**

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