The 6DISS Project: IPv6 Dissemination and Exploitation

Programme

Objectives

- To transfer knowledge on IPv6 deployment and usage to NRENs, Universities, commercial organisations, ISPs, governments and regulators in:

  - Asia Pacific Region   Soton-ECS
  - Mediterranean, Sub-Saharan Africa & Caribbean   RENATER
  - SE Europe   GRNET
  - Southern Africa   FCCN
  - South & Central America   TERENA, FCCN
  - Newly-Independent States   UCL
  - India & China   Soton-ECS, Martel

Objectives

- To build constituencies
- To raise awareness
- To exchange best practices
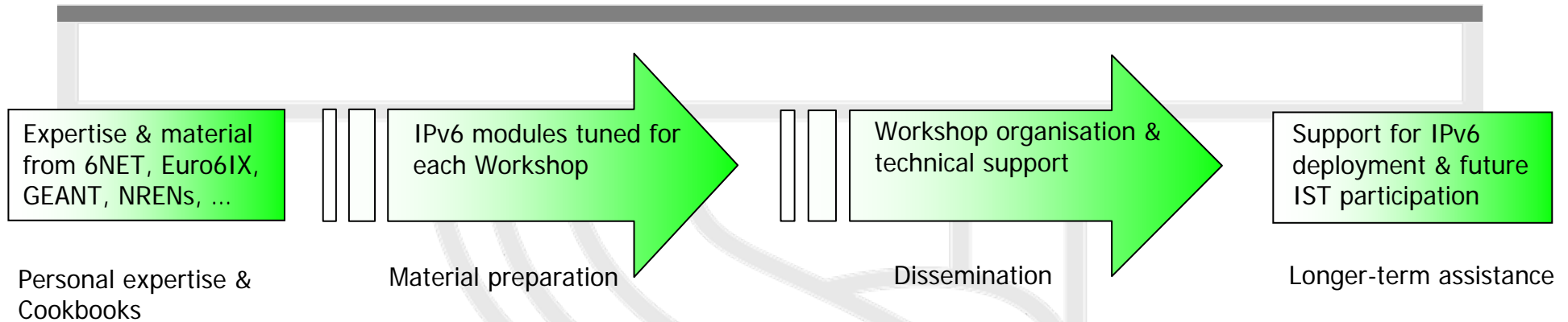- To engage the organisations in future IST projects

Approach

To take the knowledge gained and the documented results from the EU project 6NET: http://www.6net.org

... and build a new (smaller) project, focused on sharing the experience in a practical way

Approach

| Expertise & material from 6NET, Euro6IX, GEANT, NRENs, ... | IPv6 modules tuned for each Workshop | Workshop organisation & technical support | Support for IPv6 deployment & future IST participation |

Personal expertise & Cookbooks

Material preparation

Dissemination

Longer-term assistance

At least 8 workshops will be given to disseminate information on:

- IPv6 Addressing and Routing
    - IPv6 deployment and migration strategies
    - Making network services ready for IPv6 : DNS, DHCP, HTTPd, SMTP, ...
    - IPv6-enabled applications
    - Monitoring and management tools
    - Multicast, Security, QoS, Renumbering, Mobility ...

Key Data

- Partners:

- Start date: 1st April 2005
- Duration: 30 months
- Total cost: € 1'053'265.00 (76.5PMs)
- EC funding: € 899'908.00
- Type of project: Specific Support Action

The 6DISS Toolkit

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

6DISS Toolkit – "Slideware"

- 400 slides inherited from the G6 Group and RENATER

- 6DISS partners then:
  - harmonised the style
  - reviewed the content
  - added new topics/modules (provided by partners)
  - split them into 20 modules
    - More convenient to handle and update
    - Easier to build up a workshop programme selecting the appropriate modules.

- Each module has an owner, responsible for the updates

- Modules continue to be added or expanded (eg. lab exercises, deployment scenarios, applications, ...)

6DISS Toolkit – "Slideware"

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 Co-existence	Soton-ECS
IPv6 Network Management	RENATER		Deployment scenarios	HUNGARNET
IPv6 Multicast	RENATER		IPv6 Applications	UCL
M6Bone	RENATER		Equipment configuration	HUNGARNET
IPv6 Autoconfiguration	FCCN		IPv6 QoS	GRNET

6DISS Toolkit – Access to remote labs

Brussels lab

IPv6 Internet

Internet

IPv6 Tunnel

7500 12K 12K

7200

7200 12K
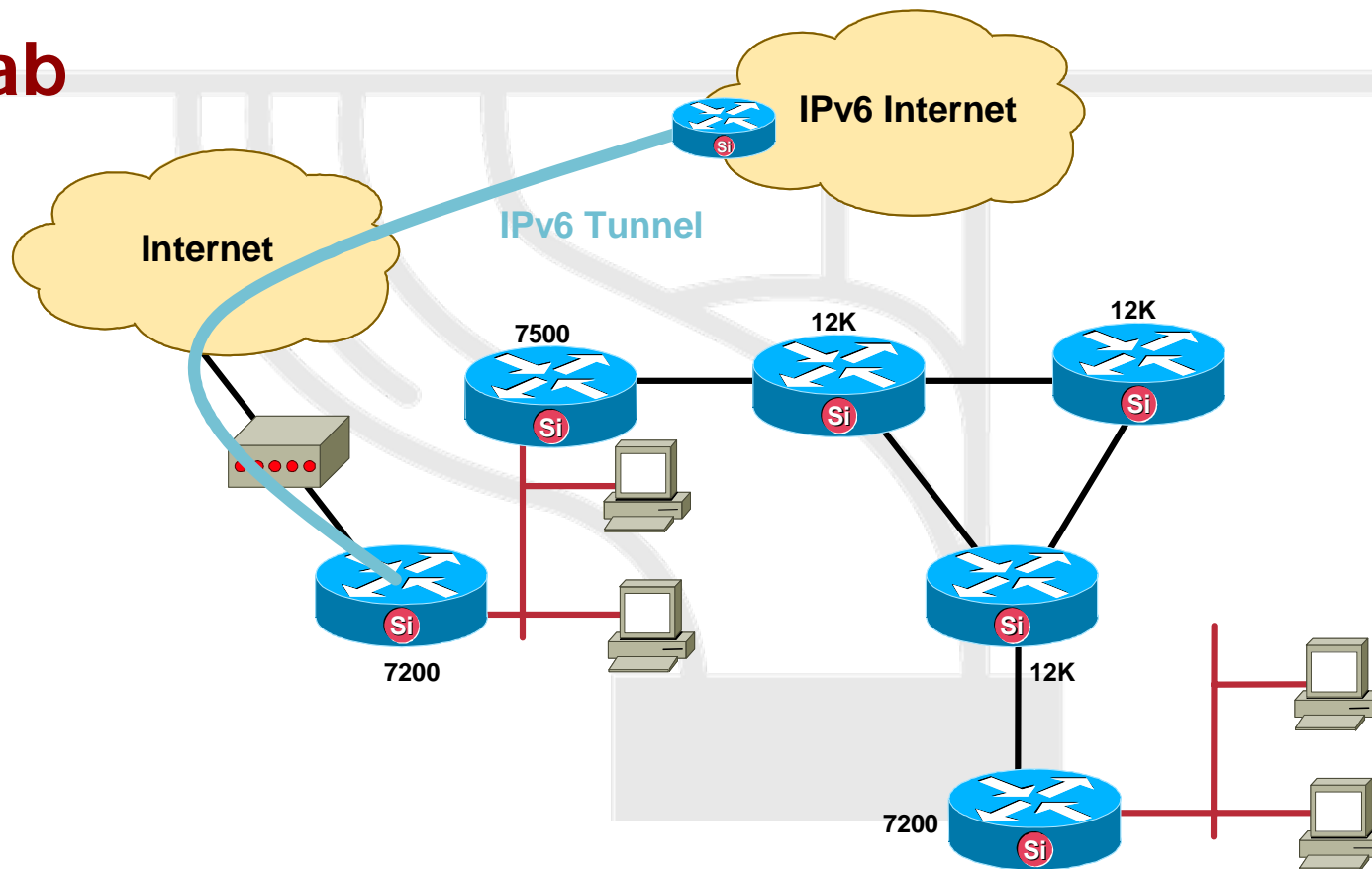
6DISS Toolkit – Access to remote labs

Paris lab

Legend:
- POS / STM-1
- GE
- FE

RENATER-4

GSR-1

GSR-2

GSR-3

7200-2

7200-3

ALCATEL
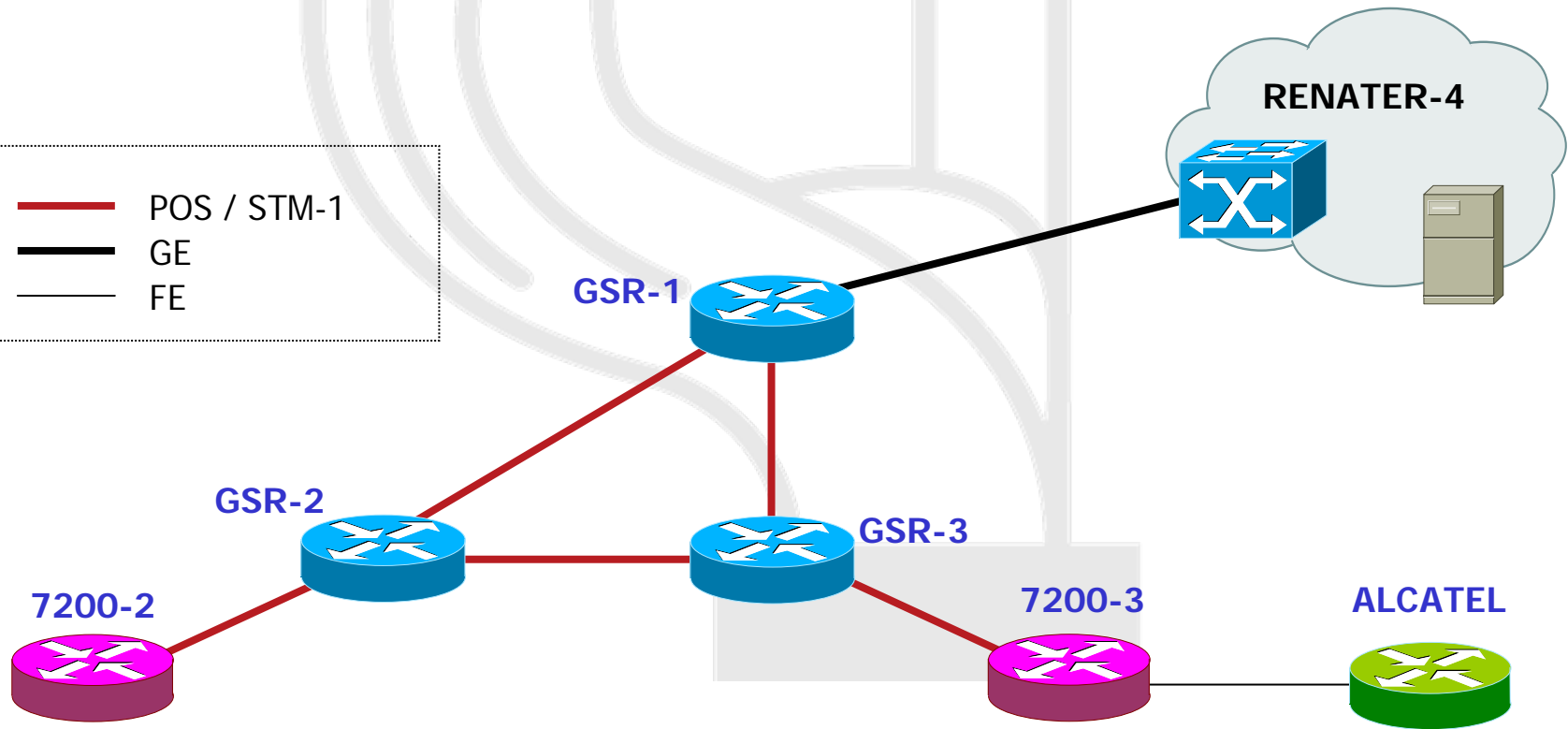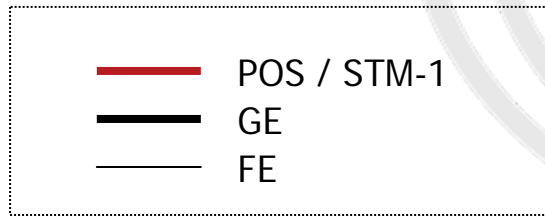
6DISS Toolkit – Reserving the labs

Booking and usage procedures…

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

- labs@6diss.org

RENATER Testbed availability

Testbed is already booked for the following dates and events :

Dates :	Events :
September 12th - 24th 2005	CIREN IP multicast tutorial
December 14th - December 27th 2005	NOC-RENATER / tests COS
January 16th - January 20th 2006	6DISS meeting
January 23rd - January 27th 2006	NOC-RENATER / tests COS
January 30th - February 3rd 2006	6DISS review
February 6th - February 10th 2006	NOC-RENATER / tests COS
February 13th - February 20th 2006	EUMEDCONNECT multicast training
March 1st - March 5th 2006	6DISS workshop - South east Europe
March 6th - March 8th 2006	RENATER multicast workshop
April 3rd - 7th 2006	6DISS workshop - EUMEDCONNECT

In order to book the testbed, please, send an email to
durand@renater.fr

6DISS Toolkit – E-learning package

Available from anywhere (accessible via 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
- individual learning flexibility
- subtitles (http://web.instruxion.com/6diss/SubsDemo/6diss_ipv6.html)

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

6DISS Toolkit – Training other Trainers

We cannot visit each region often, but we can train other people to give our workshops.

"Training the Trainers" courses can be offered in Brussels or Paris, or at your location. A "Training the Trainers" manual is available, that 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
- Description of other material available from 6DISS

6DISS Toolkit – Tiger Team

The "Tiger Team" is a channel to experts (within or outside the project). It operates via a *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
- how to configure equipment
- hardware and software requirements and releases
- transition scenarios
- management and monitoring tools
- applications

6DISS Toolkit – Website

At www.6diss.org, you can find:

- All the presentations that have been made at the workshops and in conferences, reports from the workshops, deliverables, press releases, news, etc.

- A calendar of upcoming events especially related to IPv6, and the upcoming 6DISS workshops

- The link to the e-learning package

- Links to related sites

Workshop hosts can also download the information they need regarding the organisational details.

World Tour Programme

Workshops held so far:

- Asia-Pacific Region: Taipei, Taiwan (IPv6 Summit, 08/2005)
- Southern Africa: Port Elizabeth (TENET IPv6 workshop, 09/2005)
- S-E Europe: Serbia/Montenegro (03/2006)
- Mediterranean Countries: Malta (04/2006)
- South & Central America: Ecuador (07/2006)
- Sub-Saharan Africa: Senegal (10/2006)

"Hands-on" practical sessions supported at:

- Afrinic-3: Cairo, Egypt (12/2005)
- AfriNIC-4: Nairobi, Kenya 05/2006)

"IPv6 Trainers' session" in Belgium (10/2006)

Conclusions

6DISS aims to:

- assist less-developed regions to deploy the latest technology in the most efficient manner

- build contacts to organisations in these regions to support and enable their subsequent participation in projects within the IST Programme

- increase opportunities for EU manufacturers to open new - or enhance existing - markets in these developing regions

- make European research and industrial concerns aware of the highly skilled personnel who can contribute to the urgently needed improvement of ICT infrastructures

Conclusions

6DISS project is achieving its objectives well, but we know that there are lots of other related initiatives.

Cooperation, sharing information, ... is a must

So, if you are planning an event that includes IPv6 information dissemination, training, etc., do not hesitate to get in a touch with us.

Contact us through our Website (www.6diss.org), or send a mail to helpdesk@6diss.org