



IPv6: The Solution for IP Crisis

Dr. Sathya Rao

Telscom, Bern Switzerland (rao@Telscom.ch)

SANOG14, Chennai, India , July 2009

Sheet 1

TELSC 🔊 M

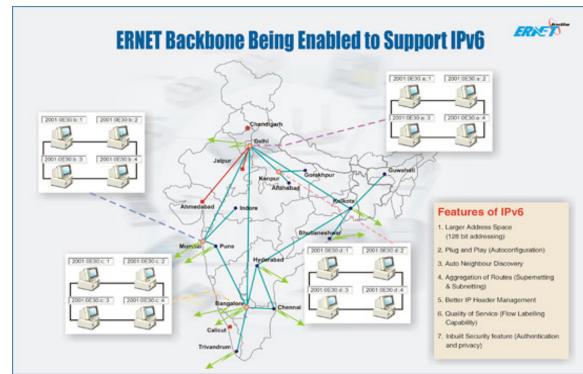
ERNET

ERNET is the Indian Education and Research Network

ERNET connects more than 1400 Universities/R&D Institutes

- GARUDA network has 45 nodes and has capability to support IPv6.
- ERNET is connected to GEANT with native IPv6

IPv6 experiments are being planned with the EU-FP7 project 6CHOICE



SANOG14, Chennai, India , July 2009

Sheet 2

T E L S C 🔊 M

India : Ready to take-off

- ERNET is similar to GEANT and is IPv6 enabled
- 6CHOICE has important academic, scientific and industrial partners from India and Europe to develop co-operation between the two continents
 - Europe: Telscom, RENATER, Telefonica, UCL
 - India: ERNET, IIsc, SIFY, HP

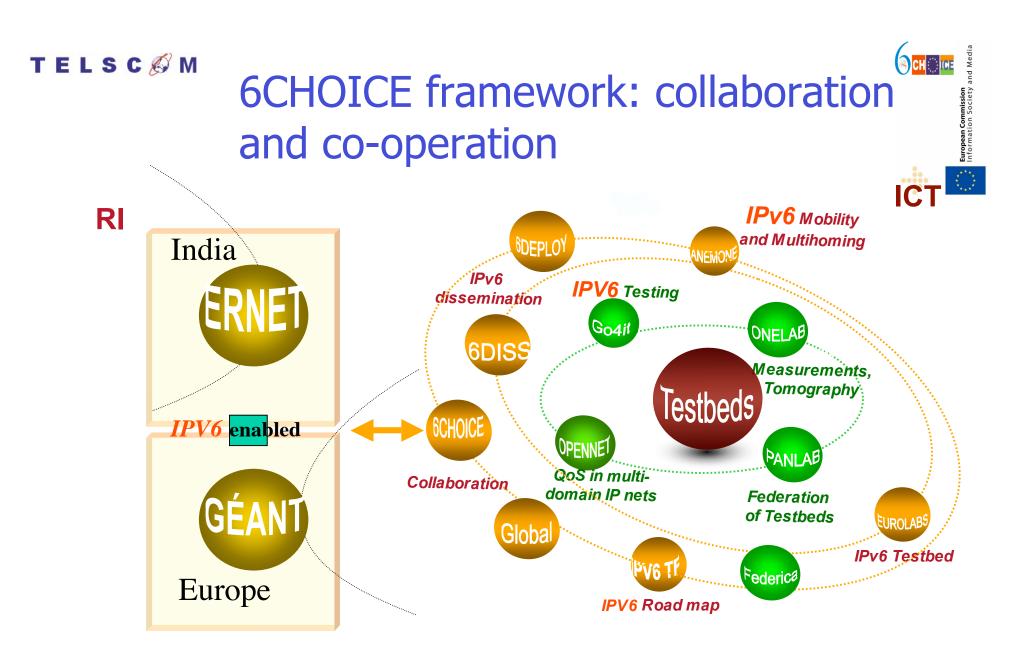
Network and services between ERNET and GEANT are being panned

- GARUDA (India-GRID) and EGEE co-operation for applications
- Dissemination: workshops for new comers

Training: Operational issues for industry and operators

EURO-INDIA cooperation is a WIN-WIN project





T E L S C 🔗 M

6CHOICE Project

European Commission Information Society and Media

6CHOICE is a support action project funded by the European Commission under FP7 framework :

- Collaboration across the Education and research networks: GEANT2 and ERNET, EGEE+GARUDA
 - ERNET + RENATER (education and research)
 - Indian Inst. Of Science + Uni. College of London (academic)
 - -SIFY + Telefonica I+D (ISPs)
 - HP + Telscom (Industrial)
- Network planning
- IPv6 Networks and Services deployment
- Applications and experiments
- Training the trainers and operational staff
- Workshops: awareness creation across stakeholders



6CHOICE: Status of activities

- ERNET and GEANT2 are interconnected with native IPv6
- All ERNET POPs are IPv6 enabled
- GARUDA network has IPv6 connectivity
- Number of applications have been implemented
 - ISABEL multimedia applications: conferencing
 - IPv6 Home Environment: remote control of appliances
 - Sensor networks: weather, transport monitoring,...
 - Streaming, Jabber, web portal,
- Experiments across labs in India and Europe are planned
- Number of workshops, training events are organised.
- Ready to help anybody:helpdesk

European Commission Information Socie





THANK YOU for your attention

ANY QUESTIONS ???

SANOG14, Chennai, India , July 2009

Sheet 7