UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Centro di Calcolo di Ateneo

VSIX - NAP del Nord-Est
RIPE 59

Riccardo Losselli – IX Member

Why a NAP

Requests:

- Broadband networks – growing demand
- High number of local (often small) operators that could benefit from having a local NAP without having to connect to Milan/Rome
- Need/Want to keep local information/comunications local

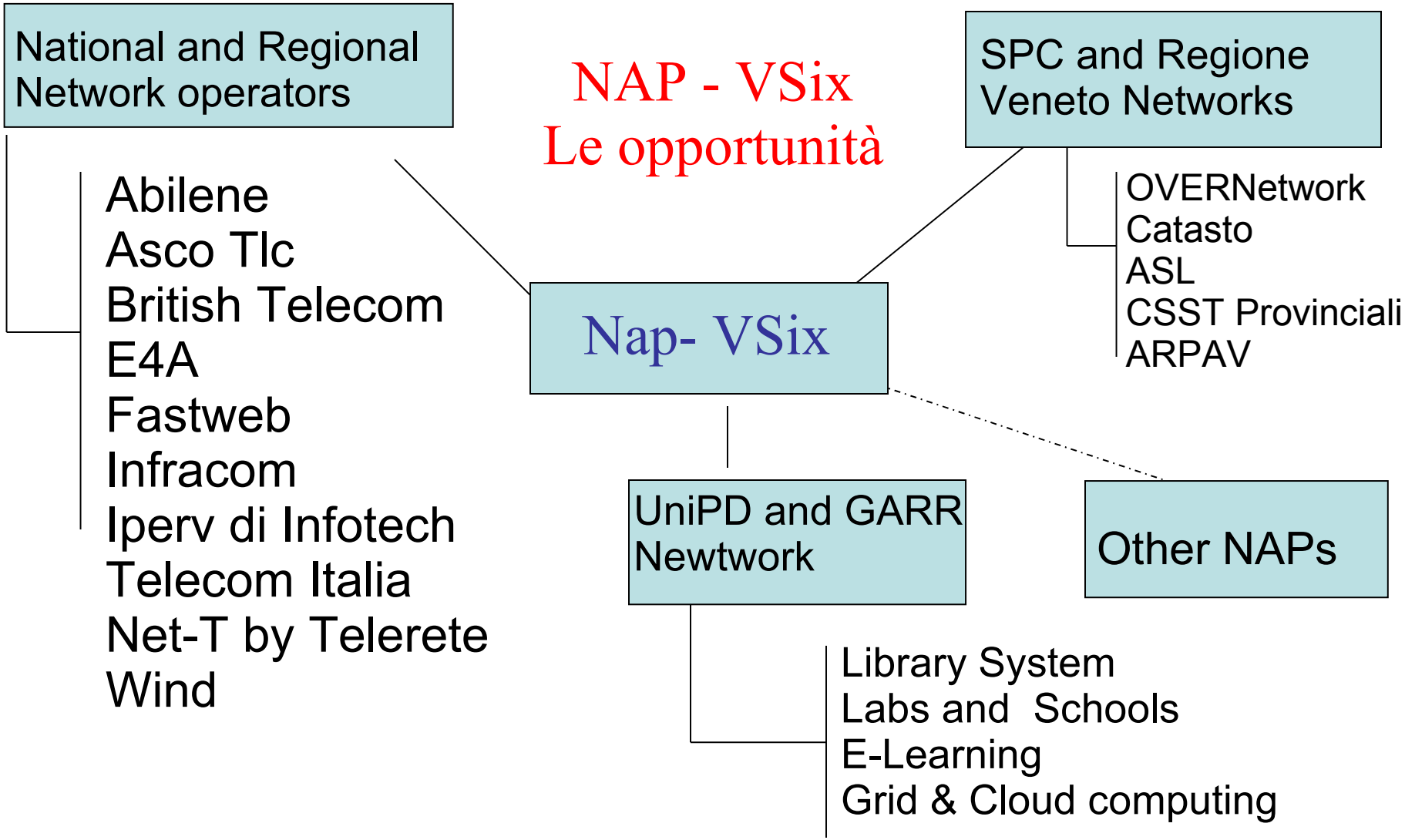
Answers:

- Create an infrastructure to integrate and let different networks cooperate between them and with local institutions;
- Give operators clear rules to follow, without interfering in the market (SLA, policies, etc , and giving them and additional opportunity to grow

Why a NAP in the North East

- The new GARR-X Network
- Number of local/national operators
- Request for high quality services: grid computing Small/Medium sized businesses, cloud computing for developer and startups
- Request for high quality services to the local government agencies:: P.A. 2.0 and OVERNetwork Project
- Interesting location for both Italians and foreign operators: Diverse path between Milan/Rome – Best path toward European networks (Austria, Slovenia, Hungary, etc) with strong economical/cultural links with Italy

NAP - VSix
Le opportunità



The NAP - VSix

NAP management is done in the Centro di Calcolo of Padua University, through:

- A Scientific/Technical comitee of the Centro di Calcolo dell'Ateneo (CTS) – University of Padua
- The Operator Commitee (one reprentative for each NAP member)
- The Operations Team

NAP - VSIX
Architecture

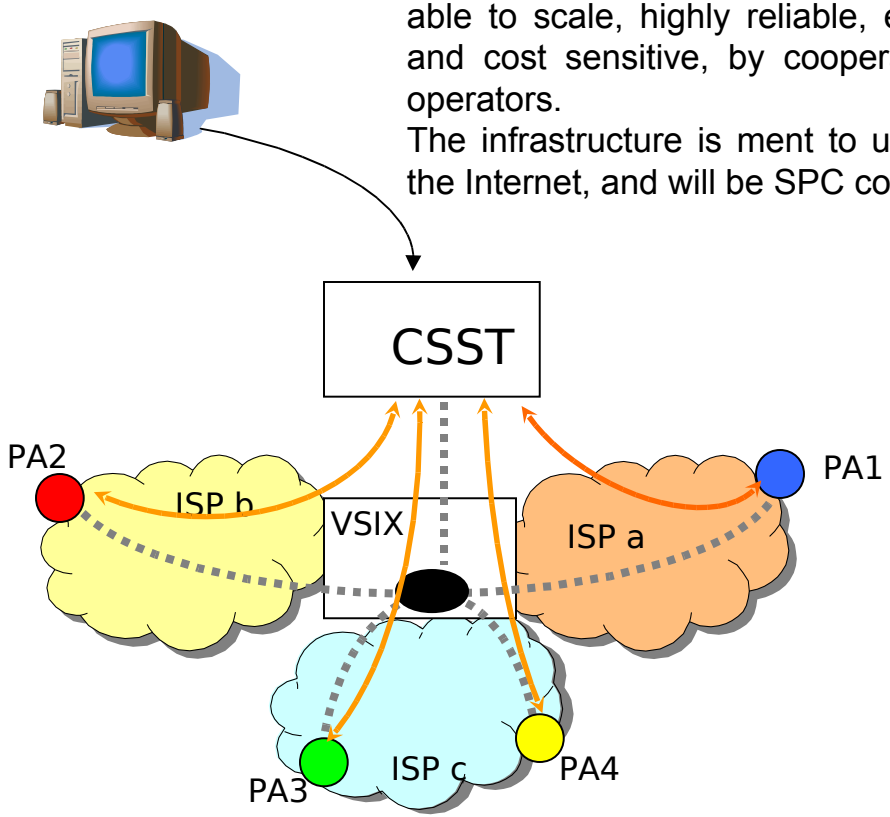
- Main Vsix infrastructures:
  - Layer 2 peering infrastructure
  - IPv4 address space dedicated to NAP services
  - Border Router e AS to test and monitor peering status
  - Network security devices
  - Servers dedicated to::
    - Monitoring and alarms
    - DNS
    - Web

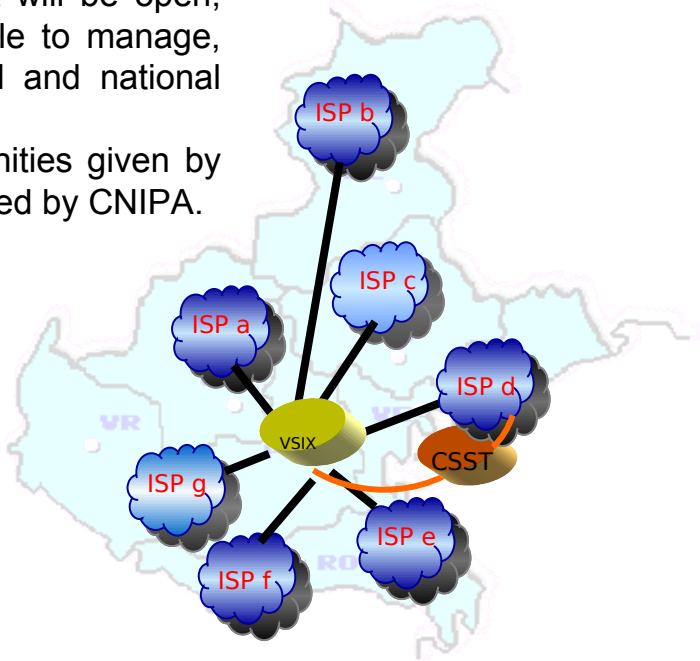
NAP - VSIX
Services

- Colocation services to host members peering routers and equipments
- Layer2 cross connects
- Private and public peering services
- Monitoring services
- "OVERNetwork" operators accreditation
- Interconnection with other NAPs: agreement with TOP-IX – the Turin/Piemonte Exchange

OVERNet – technology model

Regione del Veneto is experimenting in the region a wide area interconnection infrastructure open to public administration offices and infrastructures, that will be open, able to scale, highly reliable, easy and flexible to manage, and cost sensitive, by cooperating with local and national operators.
The infrastructure is ment to use the opportunities given by the Internet, and will be SPC compliant, as stated by CNIPA.





UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Thank you

staff@vsix.it