

# "How to conciliate the increase of users requirements and the operation of a national network ? the code of deontology of RENATER

**Dany VANDROMME**

**Director of RENATER**

*[Dany.Vandromme@renater.fr](mailto:Dany.Vandromme@renater.fr)*

*[www.renater.fr](http://www.renater.fr)*



ERF Workshop, Lund, 27 October 2009



# RENATER, as a Research Infrastructure

- RENATER is a telecommunication network, dedicated to Research and Education
- It provides global connectivity to more than 1000 sites, i.e. several millions individual users in France
- Beyond interconnections of RENATER user sites, it gives also access to the global Research and Education community and to the Internet.



# RENATER, as a Research Infrastructure

- RENATER is one of the 31 members (NRENs) of the GEANT pan-European network .
- As such, it contributes through its own infrastructure to the pan-European network and participates to the governance of this Research Infrastructure



# Access conditions to RENATER

- All Research and Education activities (public or private) are eligible (legitimate) to use the RENATER infrastructure.
- There is no “scientific excellence” criterion, only the compliance with the RENATER Acceptable Use Policy is required.
- However, access is not free of charge for end users who are not funded by



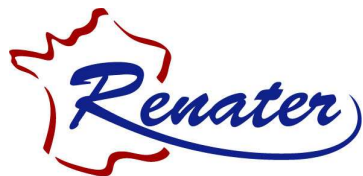
RENATER members

ERF Workshop, Lund, 27 October 2009



# RENATER's members

- Ministries of Education, Higher Education and Research
- Universities
- CNRS, CEA, CNES, INRIA, INRA, INSERM, IRD, CIRAD, BRGM, CEMAGREF, ONERA
- 90% resources taken by members, 10% by non-members



# RENATER's business model

- Quite singular compared to other European NRENs...
- RENATER does not provide the last mile infrastructure to users sites (but all PoP are located into University or Research premises).
- Some exceptions like CEA or ITER (creation of new PoPs at Cadarache and Bruyere)



# RENATER's business model

- The cost of the basic infrastructure is shared between users. This allows a wide portfolio of network services, which is common to all.
- All users are travelling "Premium"!
- RENATER is cautious not to compete with Telcos for commercial offers (like Internet access).



# Increasing user expectations

- Network infrastructure evolution is foreseen in a mid-to-long term view.
- But RENATER is assumed to provide the most advanced services for the optimum cost !
- The overall cost of RENATER is slowly decreasing over years!





# Pro-active role

- Teach the users what is already available to them
- Feed the dreams for after to-morrow by making it true to-morrow or even today.
- Imagine new services to propose or answer specific requests from the users
- Support on its own budget innovation, prototyping and demonstration phases



# Pro-active role examples

- 10G light-paths provided to DEISA and GRID5000 infrastructures
- LHCOPN at no extra cost to users
- Implement e2e connectivity (2x1GE) between Lyon (CC-IN2P3) and Chicago (FNAL)
- Provide dedicated connectivity to NL and JP for Grid research infrastructures



# Pro-active role examples

- IPv4/IPv6 – Anycast/multicast
- Hosting of anycast clouds for DNS
- Identity federation organisation
- Certificat services
- Video-conferencing platform
- Anti-spam/anti-virus
- Etc...



# Pro-active role examples

- Increase the global connectivity for all users through participation to projects like ALICE (LAC), EUMEDCONNECT (MED), TEIN (AP), ORIENT (CN), FEAST (AF), etc...
- Partnership with more global projects (LHCOPN, DEISA, VLBI, LOFAR, etc...) while other require mostly bandwidth



# Non-negotiable aspects

- AUP compliance
- Security problems
- Financial rules for non-members, EXCEPT form demonstration or prototyping phases...



# CONCLUSIONS

- According to ESFRI's views of Research Infrastructures:
  - Unique user access interface
  - Not based on excellence but on legitimacy
  - Unique governance (even with regional networks...)

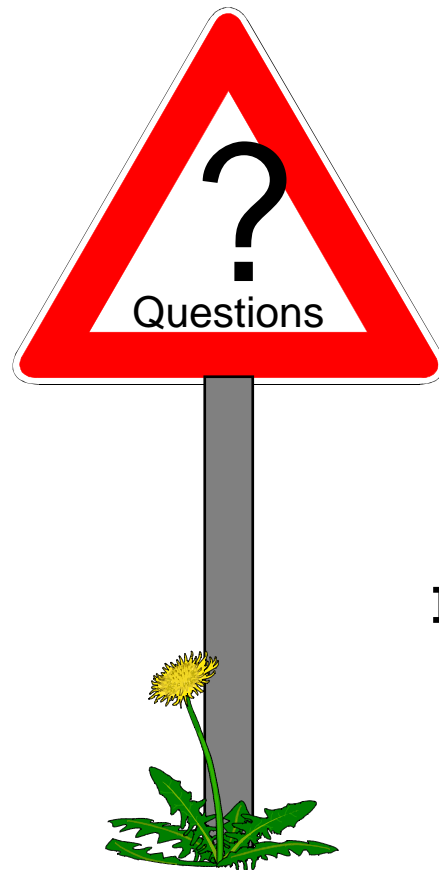


# CONCLUSIONS

- AUP first
- Fair to all (members and others)
- Proactive to pull forward the scientific community
- Minimizing the weight of financial constraints to prevent to slow down progress



# End of presentation



Dany.Vandromme@renater.fr



ERF Workshop, Lund, 27 October 2009

