

The future of NREN's

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Nordic Infrastructure for Research & Education



Evolutionary Pressure:

- 1. Financial challenges***
- 2. Increased Global Competition***
- 3. Political strategies.***
- 4. Complex (Virtual..) User Communities.***
- 5. Base services becoming commodity.***

The NORDUnet 2020 Inspiration Paper

Created by NORDUnet Senior Staff:

- René Buch – Chief Executive Officer
- Josva Kleist – Chief Development Officer
- Lars Fischer – Chief Technology Officer
- Jerry Sobieski – Chief Research Initiatives Officer
- Jørgen Qvist – Chief Network Operating Officer

Amended and approved by the NORDUnet Board.

- 1. Globalization**
- 2. Organization of e-Infrastructure.**
- 3. Short term ad hoc collaborative projects.**
- 4. Geographically scattered data sources.**
- 5. Increasing amount of managed data.**
- 6. New users with little technology knowledge.**
- 7. Mobility.**
- 8. Social networking.**
- 9. eEducation**
- 10. Cloud Integration.**
- 11. Security and Data Ownership.**
- 12. Software Development & IPR**
- 13. Network Media Distribution**
- 14. Public - Private Partnerships.**
- 15. Green IT & the Environment.**

With the 15 Challenges it is clear that the NRENs must evolve to meet the constituency requirements by focusing on providing layered service offerings enabling new opportunities for the users.

Therefore it is our opinion that NRENs towards 2020 must assume an approach that encompass the following concepts:

1 The NREN as a Global Network Service Provider

Federation • Open Exchanges • Virtualization • Mobility • Cross Border fibre • Regional Collaboration.

2 The NREN as a Community Service Provider

Global identity management • e-Campus services • Social networking • Network attached media distribution • Cloud Services • VCONF & Web based collaboration tools.

3 The NREN as the e-Science enabler

Enable, Educate & Evangelise the e-Science Plug.

4 The NREN as the e-Education enabler

Enable, Educate & Evangelise the e-Education Plug.

5 The NREN as an Innovative Framework Provider

Provide and incubation environment that foster innovation of new ideas through removing any technology barrier.

- 1. Be Agile in response to evolutionary pressure.***
- 2. Be Efficient in response to financial environment.***
- 3. Be Professional in managing stakeholders.***
- 4. Collaborate Actively Globally.***
- 5. Engage actively with Political strategies.***
- 6. Engage actively with (Virtual..) User Communities.***
- 7. Build new service based on commodity offerings..***
- 8. Deliver innovation.***

	Reseach Network Connectivity	Global IP transit	OPN Lambda	Cross Border Fibre Coordination	Central NOC	End User NOC	GN3 Project Coordination	Project Hosting & Coordination	Software Development	AAI Community Serrvices	Equipment Hosting	Virtual Server Hosting	Network Media Transcoding & Distribution	Adobe Connect	VCONF MCU Service	WEB based Vconf Service	Telepresence Gateway Service	EU project Coordination	File Sharing Service	Spam Filtering Service	Community Communication	
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FORSKNINGSNETTET																						
FUNET																						
Rhnet																						
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