

Inspiration from **GÉANT 2020** as the
**European Communications Commons –
Knowledge without borders**

For the GN3 Innovation Workshop
Copenhagen October 10-11, 2011

**Dr. Dorte Olesen, with thanks for many of
the slides to Dr. Žiga Turk
Chairman, GÉANT Expert Group**

The Competition for Talent

The Competition of Talent

- **the future economy is the economy of talent**
- **Richard Florida:**
 - “Human Talent is the Ultimate Economic Resource”
- **Talent attracted by**
 - tolerance,
 - technology
 - other talent



PROJECT EUROPE 2030

Challenges and Opportunities

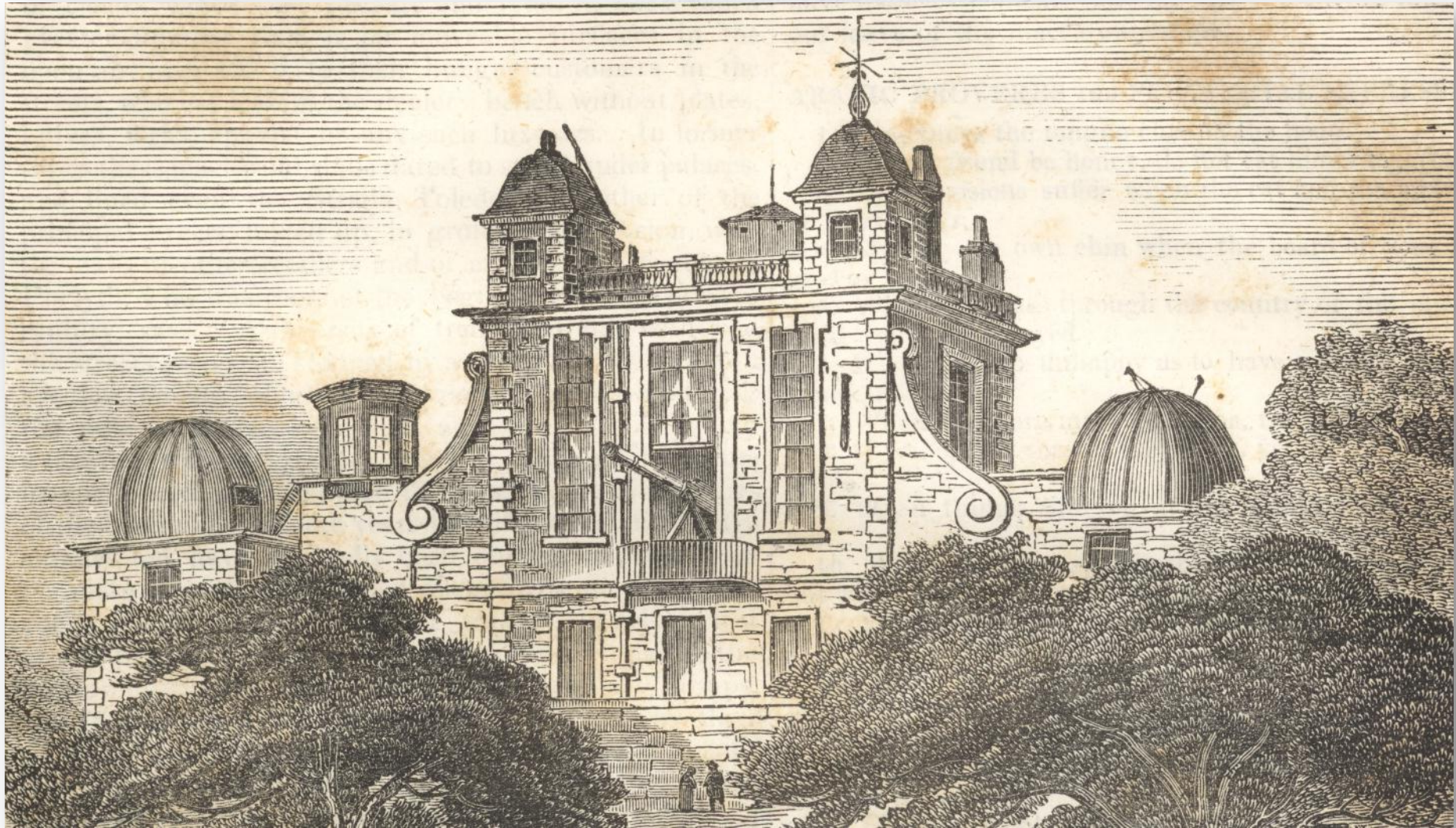
A report to the European Council
by the Reflection Group
on the Future of the EU 2030



Talent Attracted Talent to Schools



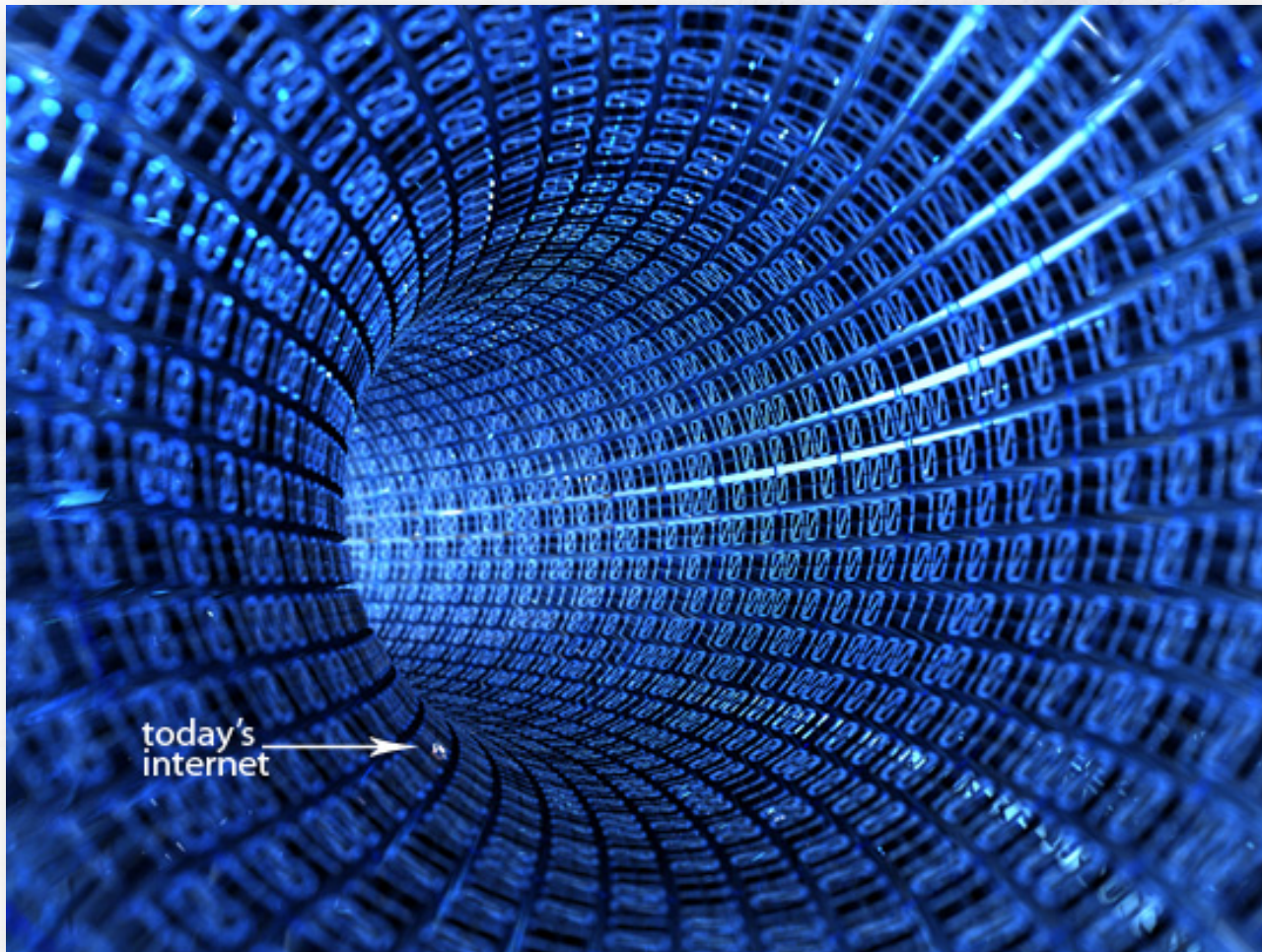
Talent Attracted to Technology like Instruments



Talent Attracted to Knowledge



Internet Changes Everything ...



- No distances
- No borders
- No locations

- Open innovation
- Open education
- Data driven research

... and Everything is Changing

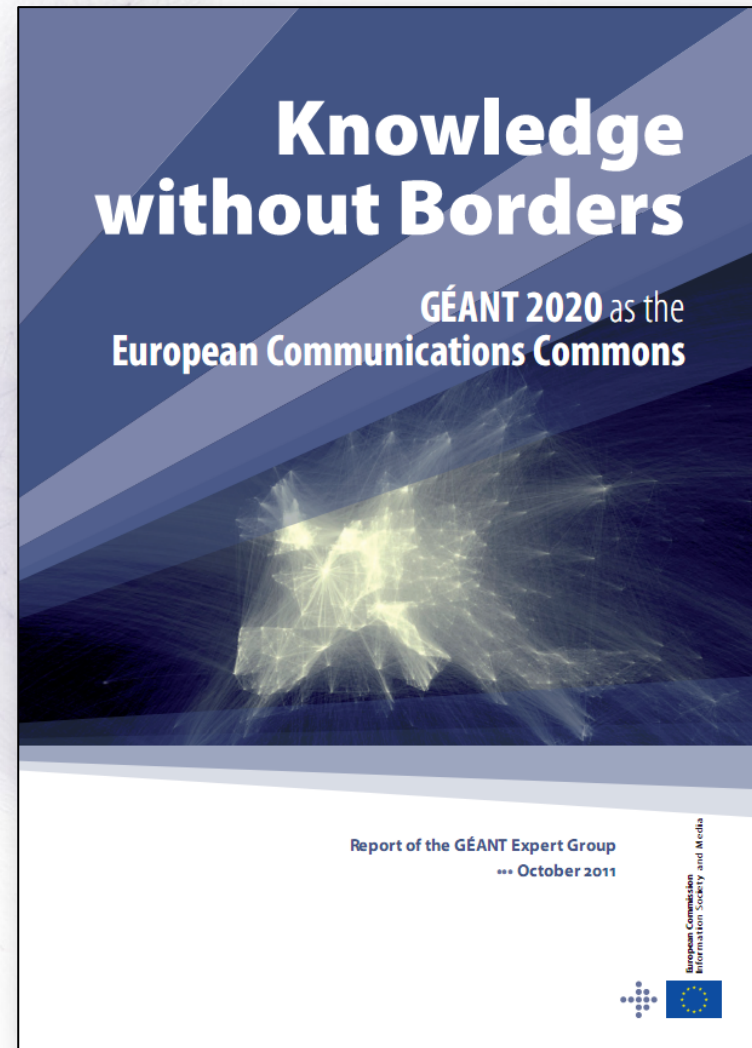
- **Post Industrial Society**
 - From scarcity to abundance
- **Climate Change**
 - Energy Revolution,
 - Greening the Economy
- **Demography**
 - Greying the economy
- **Globalization**
 - West's monopoly on science is melting away

GÉANT has been the Infrastructure for Talent

- **To continue leading in the world and**
 - remain at the forefront of the scientific and social developments,
 - to achieve the Europe 2020 goals,
- **Europe must step up its ambition and efforts to provide its talent with the best possible digital infrastructure.**
- **GÉANT2020 is our vision for the European networks achieving this.**
- **National governments and the European Institutions must see this as a vital policy goal.**

The Vision of GEG

- “GÉANT 2020” is the European **communications commons**
- where **talent** anywhere is able to **collaborate** with their peers around the world and
- to have instantaneous and unlimited access to any resource for **knowledge creation, innovation and learning,**
- **unconstrained** by the barriers of the pre-digital world.



GÉANT 2020 as Commons

- **Commons is what we share.** Creations of both nature and society that belong to all of us equally, and should be preserved and maintained for future generations.
onthecommons.org/commons-glossary
- “resources that are **collectively owned or shared** between or among populations”
en.wikipedia.org/wiki/The_commons

“GÉANT 2020” is the European communications **commons** where talent anywhere is able to collaborate with their peers around the world and to have instantaneous and unlimited access to any resource for knowledge creation, innovation and learning, unconstrained by the barriers of the pre-digital world.

GÉANT 2020 for Talent

- talent as ultimate economic resource
- talent anywhere, talent from anywhere
 - “GÉANT 2020 is rooted in values of equality, solidarity and freedom which are held in high regard by Europeans”.
- globally around the world

“GÉANT 2020” is the European communications commons where **talent anywhere** is able to collaborate with their peers around the **world** and to have instantaneous and unlimited access to any resource for knowledge creation, innovation and learning, unconstrained by the barriers of the pre-digital world.

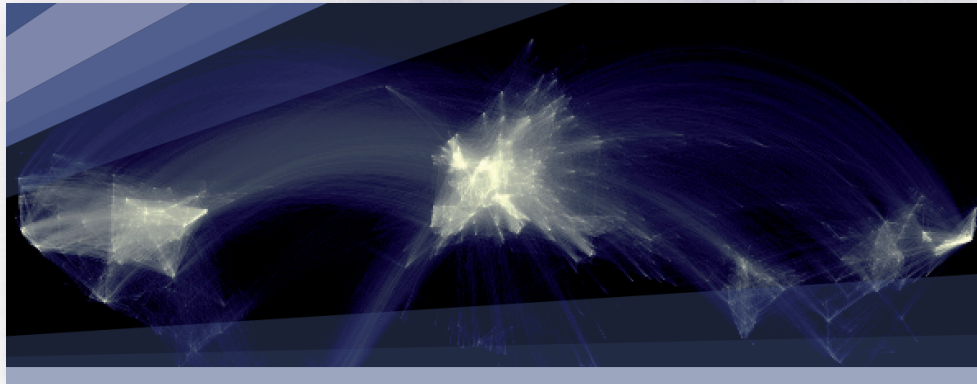
GÉANT 2020 for knowledge creation, innovation and learning

- **a common enabling infrastructure for European research and education**
- **a collaboration platform for knowledge communities**
- **an environment for knowledge creation, innovation and learning**
- **a transformative digital ecosystem**

“GÉANT 2020” is the European communications commons where talent anywhere is able to collaborate with their peers around the world and to have **instantaneous and unlimited access to any resource for knowledge creation, innovation and learning**, unconstrained by the barriers of the pre-digital world.

GÉANT 2020 Unconstrained by the past

- **because Internet changes everything!**



“GÉANT 2020” is the European communications commons where talent anywhere is able to collaborate with their peers around the world and to have instantaneous and unlimited access to any resource for knowledge creation, innovation and learning, **unconstrained by the barriers of the pre-digital world.**

Goals that Fulfill the Vision

1. Support knowledge communities by providing world-class **connectivity** and **services**.
2. Support the **growth** of these communities, in both breadth and depth within Europe, and opening up to talent beyond Europe's borders ;
3. Push the state-of-the-art of the communications commons by constant **innovation** and by translating this innovation into a competitive European ICT sector;
4. **Reorganize** to cope with the constantly changing environment.

Dozens of recommendations for

- **European Union**
- **Member states**
- **National Research and Education Networks (NRENs)**
- **Networking Community**
 - NREN-PC, Terena, DANTE
- **User community**

1. Support Knowledge Communities

- **GÉANT 2020 should enable world-class research and education at all levels and in all disciplines, and facilitate new user communities in emerging areas of science.**
- **The networks must evolve into service-enabled infrastructures that provide a platform for innovation by users**

Support Knowledge Communities - continued

- **NRENs should focus on those services not available from commercial providers and on stimulating market innovation**
...
- **Think of the weakest link: NRENs will have to work much more closely with campus and other local networks to ensure that users benefit and that solutions for true multi-domain networking are found (eg in the area of security)**

2. Support the growth of knowledge communities

- **Beyond organizations:**
 - Open up organizational walls
- **Beyond digital divides**
 - In Europe, within countries, solidarity
- **Beyond Europe**
 - GÉANT as a global hub of science, active in serving all major international research projects
- **Beyond traditional community**
 - But keeping focus on main mission

3 Push the State of the Art

- **Organize for innovation**
 - A much stronger focus on innovation, opening up to industry, academia and users
- **GÉANT as platform for innovation**
 - Innovation here means not just technological innovation, but also in the use of technology and the provision of services. NRENs should become living labs, providing testbeds for future technologies

Push the State of the Art - continued

- **Provide a research partner and lead customer for the European ICT industry**
- - NRENs, DANTE and funding agencies should use pre-commercial procurement to foster innovation in technology and services within European industry
- **Work more closely with industry in service provision**
- - the benchmark should be whether GÉANT 2020 can add value over what is commercially available, eg through coordination, market aggregation, resource sharing or sharing of best practice

4 Reorganize to Cope with Change

- **Structure the governance of the European Communications Commons for accountability and transparency.**
 - Distinguish between advisory, supervisory and executive functions in organisations with well defined and non-overlapping responsibilities and representations;
- **Ensure a stable and sustainable funding regime.**
 - Overall, a step-change is required in Europe's public investment in e-infrastructure in general, and the research networks in particular. Core backbone services to sustain the European Communications Commons should be fully funded by the EU
- **The European networks should fully participate in supporting global collaborations.**
 - USA, BRICs, Africa
- **Align the regulatory frameworks in Europe to NRENs' potential.**
 - A coherent European view on regulation may make more public services benefit from the networks than just their research and education core users.

“There is ~~no~~ such thing as a free lunch”



100€ spent in Europe on Research and Education



4€ by the EU



0.02 € for common part of the EU networks

...

Or should it be 0.03€ ?

In Conclusion

- **GÉANT is United Europe “in silico”.**
- **Demonstrates European added value.**
- **Makes debates on more/less European integration irrelevant**
 - it could not work in any other way
- **Knowledge knows no borders.**
- **Knowledge is the future!**

Jean Monnet

“If I would make EU again, I would not start with coal and steel, I would start with culture”.

and if he would be live today, he would start with the Internet!



Knowledge without Borders

- **The report Géant 2020 as the European Communications Commons**
- - available on paper from the EC or digitally
- - <http://cordis.europa.eu/fp7/ict/e-infrastructure/docs/geg-report.pdf>

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Google Image Search, source listed in image properties