



@EaPEC 20167 October 2016Walter van Dijk, SURFnet



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- Introduction to Enlighten Your Research
- EYR @ EaP
- Announcement of awarded proposals



EYR HISTORY

- SURFnet initiated the first national EYR program in 2007 in the Netherlands
- Program has had 6 successful editions to date









EYR HISTORY





IN 2013 EYR ALSO WENT GLOBAL



ENLIGHTEN YOUR RESEARCH GLOBAL

The EYR-Global program seeks to identify collaborations from *any country* and *any research domain* for which high performance networks can make a major impact on research.

Selected collaborations receive network services and expert help in setting up their network to facilitate research.

SURF





RESEARCHERS WORLDWIDE SUBMITTED PROPOSALS





Four projects in EYR-Global 2013

















International Networking for Climate

Research Domain Climate Science

Lead by Dean Williams, LLNL, USA

Project Goal Provide 8Gbps throughput between 5 international data replication sites used for CMIP by 2015

Current Status Performance testing and measurement nodes are set up at 5 data replication sites and network bandwidth upgrades completed at relevant sites (KNMI)

What's next? KNMI will keep the 10Gbps upgrade after 1 year (full price)







An Advanced Distributed Computing Approach to High-Resolution Climate Modeling

Research Domain Climate Science and Computer Science

Lead by Henk Dijkstra Institute for Marine and Atmospheric Research Utrecht, Utrecht University

Project Goal Run ultra-high resolution climate simulations using Supercomputers in 4 different countries via 10Gbps lightpath connections

Current Status Simulation test-runs started Sept 2014 using Stampede and Cartesius via 10Gbps lightpath allocations plus transatlantic ANA 100Gbps link for $\pm 8-12$ hrs a day

What's next? Depending on the available funds Henk will want to keep the 10G MSP at SURFsara and a 10Gbps transatlantic link







Achieving Multidisciplinary High-throughput, Quantitative Behavior Analysis with Advanced Computing and Networking Tools

Research Domain Neuroscience and Biophysics

Lead by Stephen Helms, AMOLF (EYR4/Global)

Project Goal Increase connectivity to international laboratories to transfer research data/videos between NL, US with 1Gbps

Current Status 1Gbps lightpath links AMOLF to SURFsara and SURFsara to VCU, USA have been used extensively

What's next? Stephen finished his work at AMOLF in 2015, after this other researchers will continue the work and will need the links again after a number of years.



SURF

NET



IN 2015 EYR WENT MORE GLOBAL







- The program supports research collaborations with leading-edge network resources and consulting services to accelerate research
- Program committee solicits proposals from across the global community for technical and scientific evaluations
- 3 round process:
 - First round—light weight abstract submissions from researchers
 - Consultation round
 - Second round—full proposal submission



EYR-Global 2015 project



- eDRAGEN enabling Distributed Radio Astronomy via Global r&E Networks
- Andre Gunst, ASTRON
 Collaborates with
 - Shaun Amy, CSIRO Astronomy & Space Science, Australia
 - Sergei Gulyaev, Institute for
 Radio Astronomy and Space Research (IRASR), New Zealand



EYR-Global 2015 project

- Lighting the path for bacterial drug resistance discovery
- Thomas Abeel, TU Delft
- **Collaborates with**
- Ashlee Earl, Broad Institute of MIT and Harvard, USA



High-level overview of existing and proposed infrastructure. In orange is the current path, in blue the proposed path.



- Researchers are not ICT project managers
- Most of the work is in the local domains
- Bringing together researchers and their ICT departments is beneficial
- Tuning between network and higher layers at end sites is necessary
- Commitment is essential from all involved domains (NRENs, regional networks, campus, computing centers, etc.)

EaP started EYR in 2016



- EAP countries want to
 - Know their researchers
 - Support their researchers more
 - Understand the needs of the researchers
- EYR is a nice way for achieving these goals



Awarded EYR proposals



- "Mobile application for fast creation and usage of excursions media materials on city or locality" by Yury Hetsevich, The National Academy of Sciences of Belarus
 - In collaboration with Yury Kim, Yonsei University, Republic of Korea
- "A Molecular Dynamics Study of Surfactant/Phospholipid/Nanosystems", by Armen Poghosyan, International Scientific-Educational Center of NAS RA, Armenia
 - In collaboration with Joachim Koetz, Institut f
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 ät Potsdam, Germany

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Good luck to the awardees!

Eastern Partnership Connect





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