NordForsk

Nordic eScience

Erlendur Helgason
Senior Adviser

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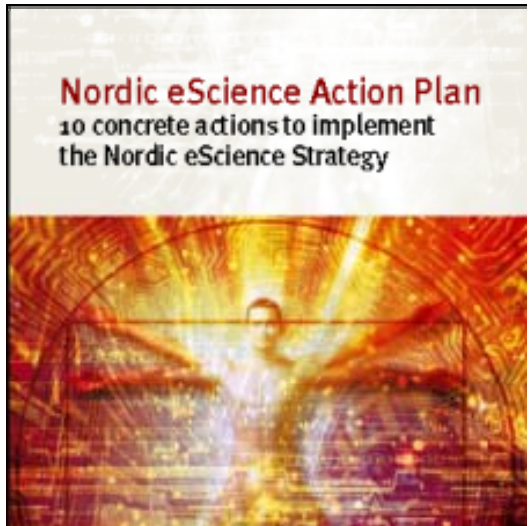
th the Nordic eScience Globalisation tiative and the Nordic Collaboration on mputing and Data are hosted by rdForsk

NordForsk is a platform for joint Nordic research and research policy development

The aim is to facilitate cooperation in all field of research, higher education, and research driven innovation when this adds value to wh is being done nationally

One of the priorities is to initiate and particip in multidisciplinary programs formulated in

Science is about developing and applying advanced ols within information and communication technology CT) in order to exploit a new mode of advancing search, complementing theory and experiments. Science is also about global collaboration within key eas of science, and about the next generation of frastructures that will enable it.”



Computational science is now indispensable to the solution of complex problems in every sector, from traditional science and engineering domains to such key areas as national security, public health, and economic innovation. Advances i computing and connectivity make it possible to develop computational models and capture and analyze unprecedented amounts of experimental and observational data to address problems previously deemed intractable or beyond imagination. [2005 report from the US President's Information technology Advisory Committee (PITAC)]

eScience, promises to revolutionise the scientific discovery process, as did the 'Scientific Renaissance' in laying the basis for modern science. [2009 communication from the European

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Way back

tivities in the Nordic
untries
-Science research
-Science education
-Infrastructure

laborative efforts,
l joint/coordinated
ticipation in e.g.
initiatives

The eNORIA grou

Now

Nordic e-Scie
Globalisation Initia

Nordic collaboration
computing and stora

Great future!

rway: eScience - Infrastructure, Theory and Application
VITA). 2005 – 2016. Ca 60 MNOK/year for both eScience ar
mputing/data infrastructure

veden: Strategic Research Area efforts (SeRC, eSSENCE).
10 – 2014 ++. 58 MSEK/year.

nland: LASTU research programme. Calls in 2009 and 2011
,5 MEUR each.

enmark: No coherent initiatives, but very strong research
oups with substantional funding

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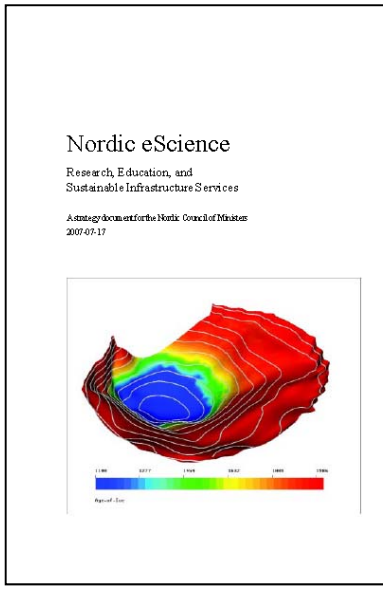
ottom-up + top-down approach!

“Nordic e-Science ad-hoc group”
Nordic e-Science report (2007)

NordForsk Noria-NET on e-Science
ORIA), commissioned by Nordic Council of
isters (NCM)
Nordic e-Science Action Plan (2008)

posal for the Nordic e-Science Globalisation
ative by the Nordic Council of Ministers



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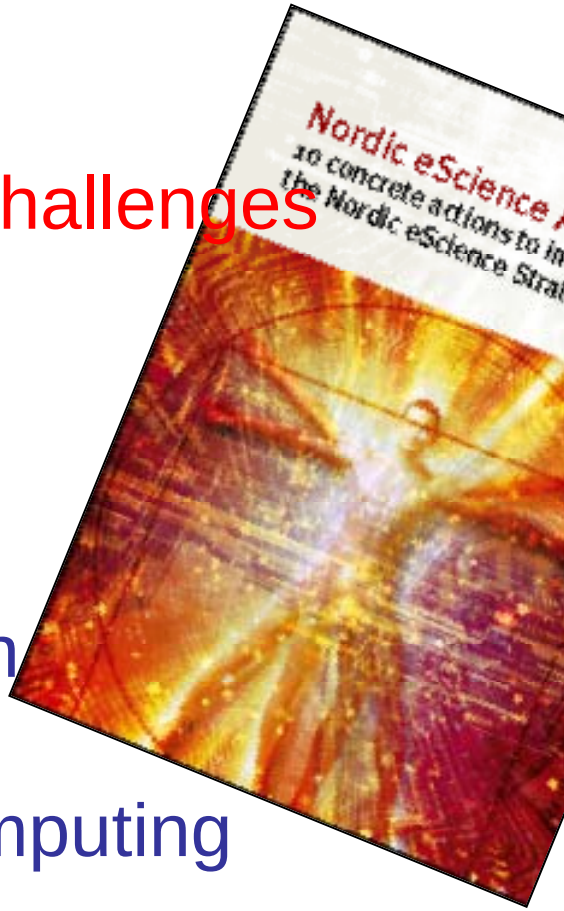
ning Researchers in e-Science Tools and Methods
rdic e-Science Masters Education
ring and Specialising Nordic e-Science Educational Modules
ering Nordic e-Science Collaboration through Mobility

rdic e-Science Program for Research into Grand Challenges
ngthening National e-Science Initiatives



n Access to National Data Repositories
itating Sustainable Grid Infrastructure Collaboration
ementing Cross-Border Sharing of Resources
ronmentally-Friendly Nordic High Performance Computing

twin-organisational framework:

The eScience Globalisation Initiative (research, educatio

Nordic Collaboration on Computing and Storage

uilds on

The eNORIA action plan (and work by eNORIA Task Forces)

Strong national activities

Existing and emerging Nordic collaborative frameworks

itial funding 12,5 + 6,5 M€ for 2011-2015 (National Agencies, ordForsk, Nordic Council of Ministers)

irector of the eScience
lobalisation Initiative, is

ative

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ordic Council of Ministers

ordForsk

he Research Council of Norway

cademy of Finland

he Swedish Research Council

bservers

anish Agency for Science, Technology and Innovation

NordForsk

tures:

ordinated effort eScience research – education – infrastructu

verned by national funding agencies (activites aligned with national strategies)

mmon pot funding (no ”juste retour” principle)

-Science research and education: Calls for proposals open to all Nordic countrie

nfrastructure for computing and data: Coordinated by the Nordic Steering Group

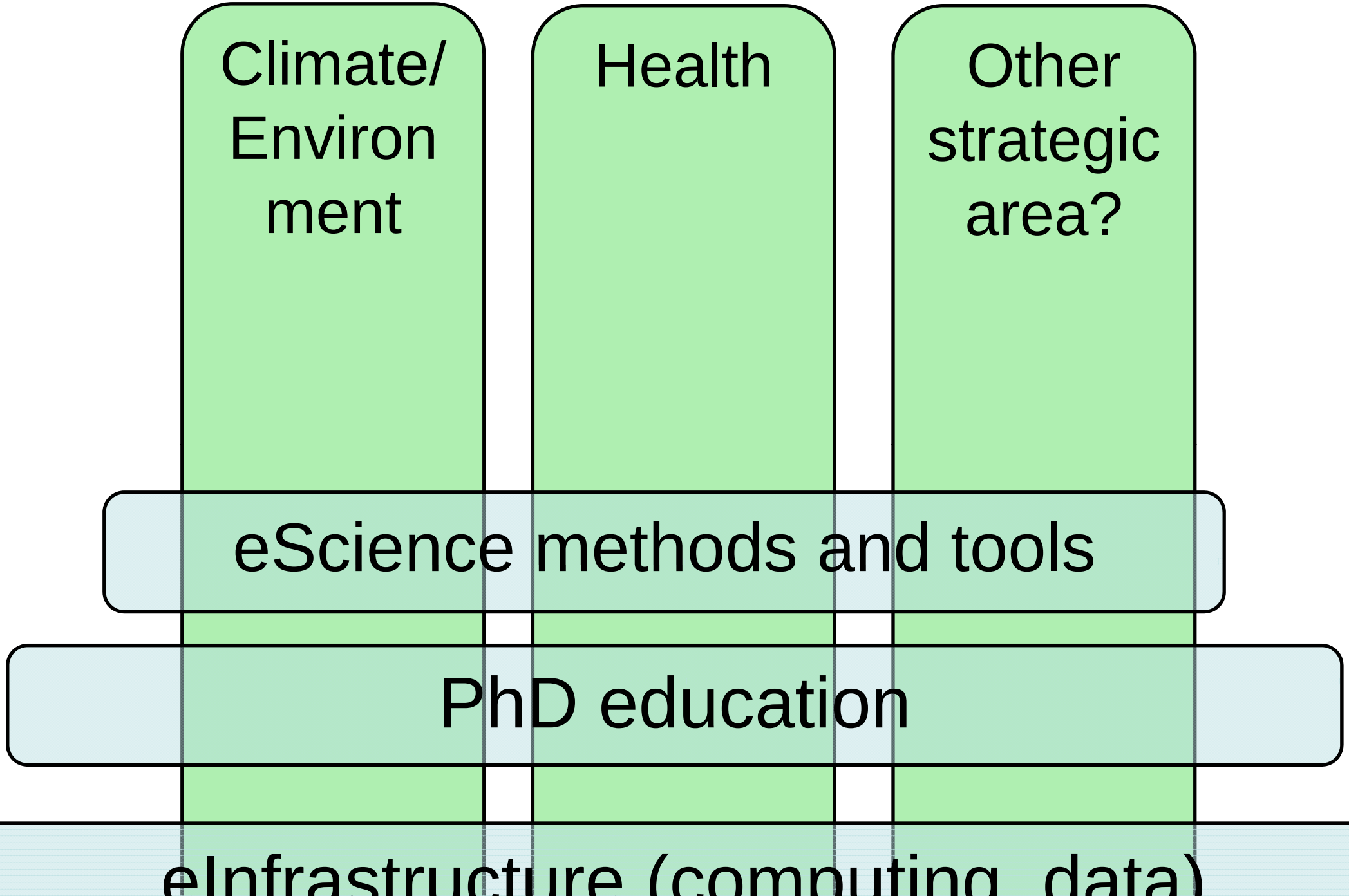
cus on supporting leading e-Science research and educatio

bloit ”regional added value”

tward-looking activities – coordinated efforts within e.g. EU-

atives

sging in discussions within e.g. the CyberBaltic initiative


Climate/ Environ ment
Health
Other strategic area?
eScience methods and tools
PhD education
eInfrastructure (computing, data)

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NORDUnet
Nordic Infrastructure for Research & Education

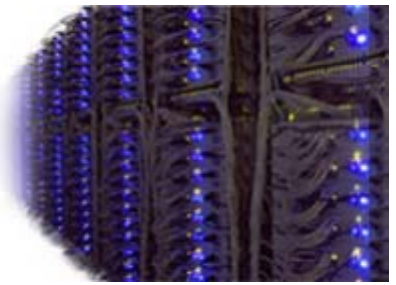
NORDUnet is a joint collaboration by the Nord
National Research and Education Networks

EGI – European Grid Infrastructure. Participation by DK, FI, NO, SE. Nordic Collaboration on Computing and Storage coordinates the participation of the Nordic National grids in EGI.

NDG
Nordic DataGri

PRACE – Partnership for Advanced Computing in Europe. ESFRI-project for massive-scale HPC. Participation by DK,FI, NO, SE

Nordic HPC
Joint Nordic Supercomputer in Iceland



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Globalisation Initia

Nordic collaboration
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NordForsk
Thank you for your attention!
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