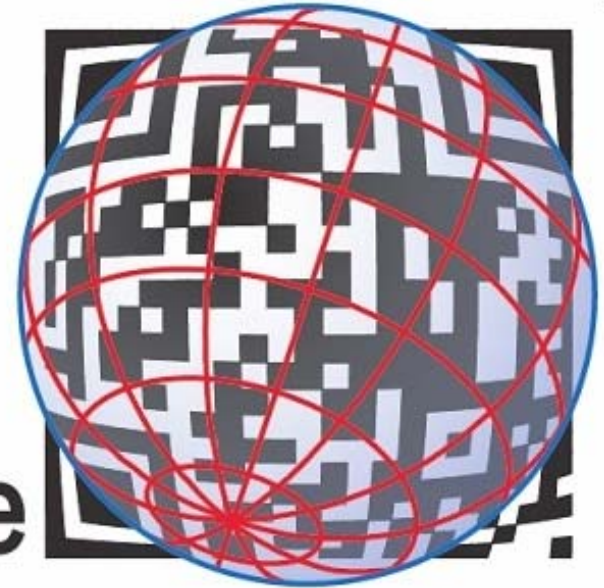




maps⁴
science



spatial data for all of science

Proposal for a large-scale research facility
NWO interview, 10 January 2012, Utrecht

maps4science.nl

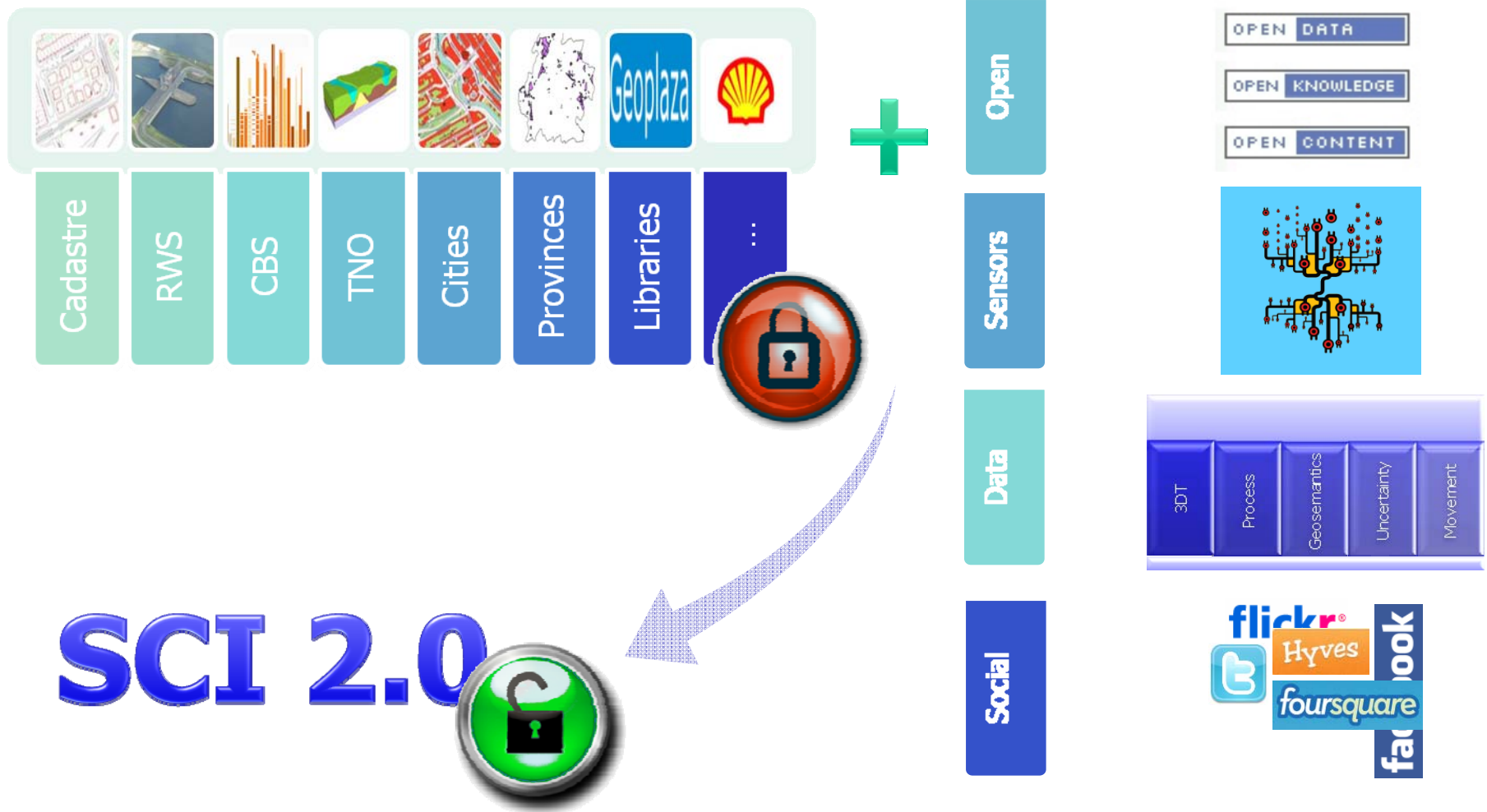
Society's changes & scientific challenges



societal processes have a clear spatial dimension



New data, novel scientific use



Location is linking pin

Physical/social/economic processes interact at common locations

Layer cake

- mix of different spatial data sources
- cross-sections by location

Baking the cake

- Generic ICT + Geotechnology = GeoICT

Eating the cake

- is delicious: many tastes and spices, many recipes
- many forms of cross-correlation possible



M4S business case

Data up/downloads, computational services

Today

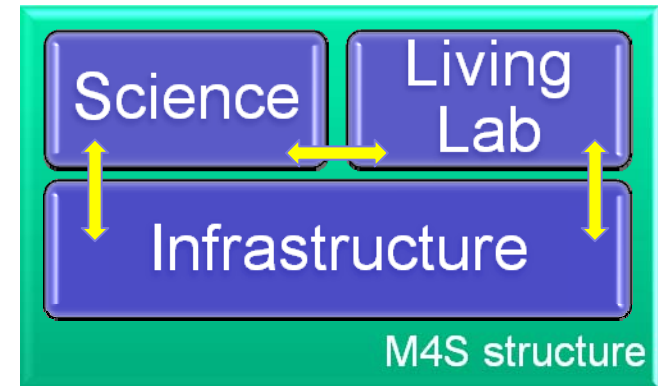
- Basic, scattered, needs expertise

Now

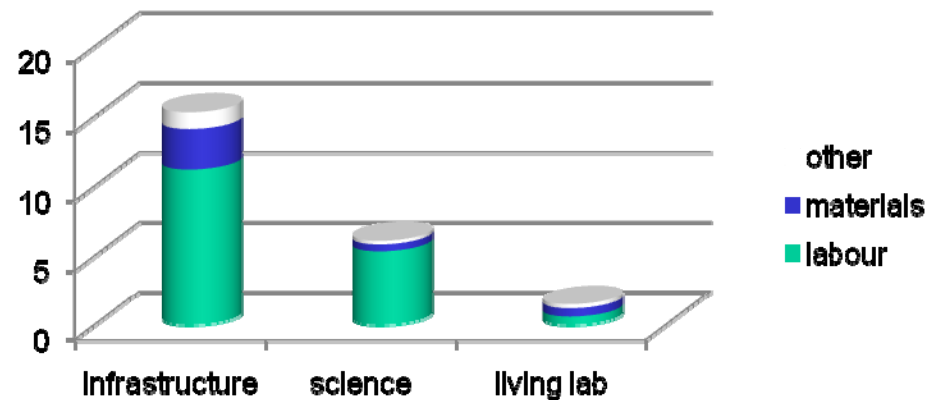
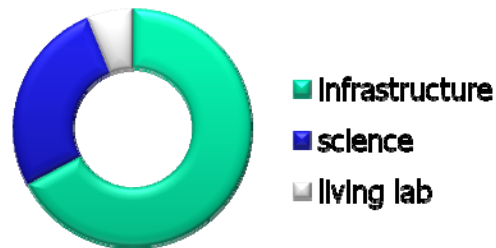
- One time budget intervention

Tomorrow

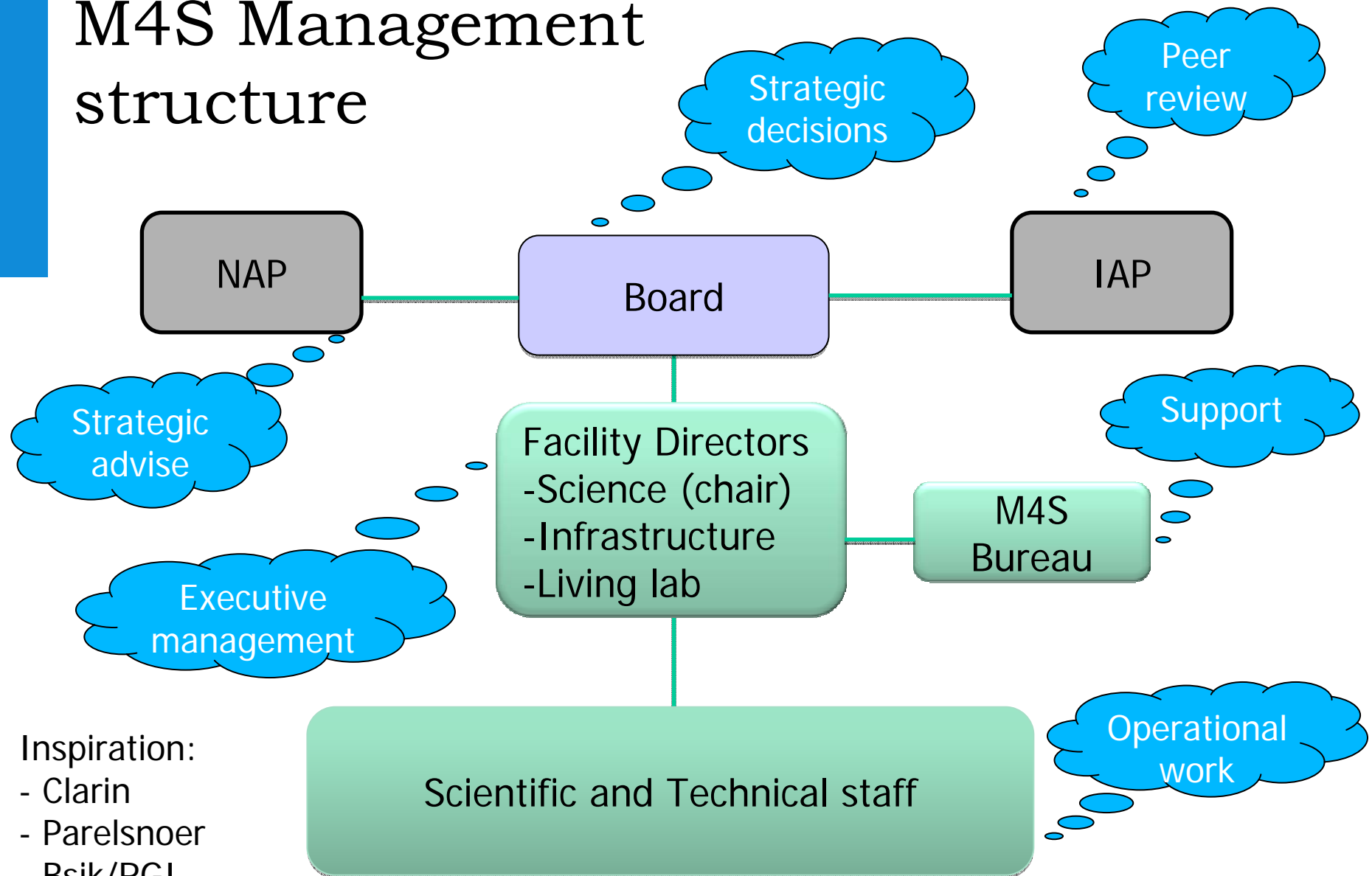
- Distributed under central orchestration
- Advanced, ease of use



Budget
22.8 M€

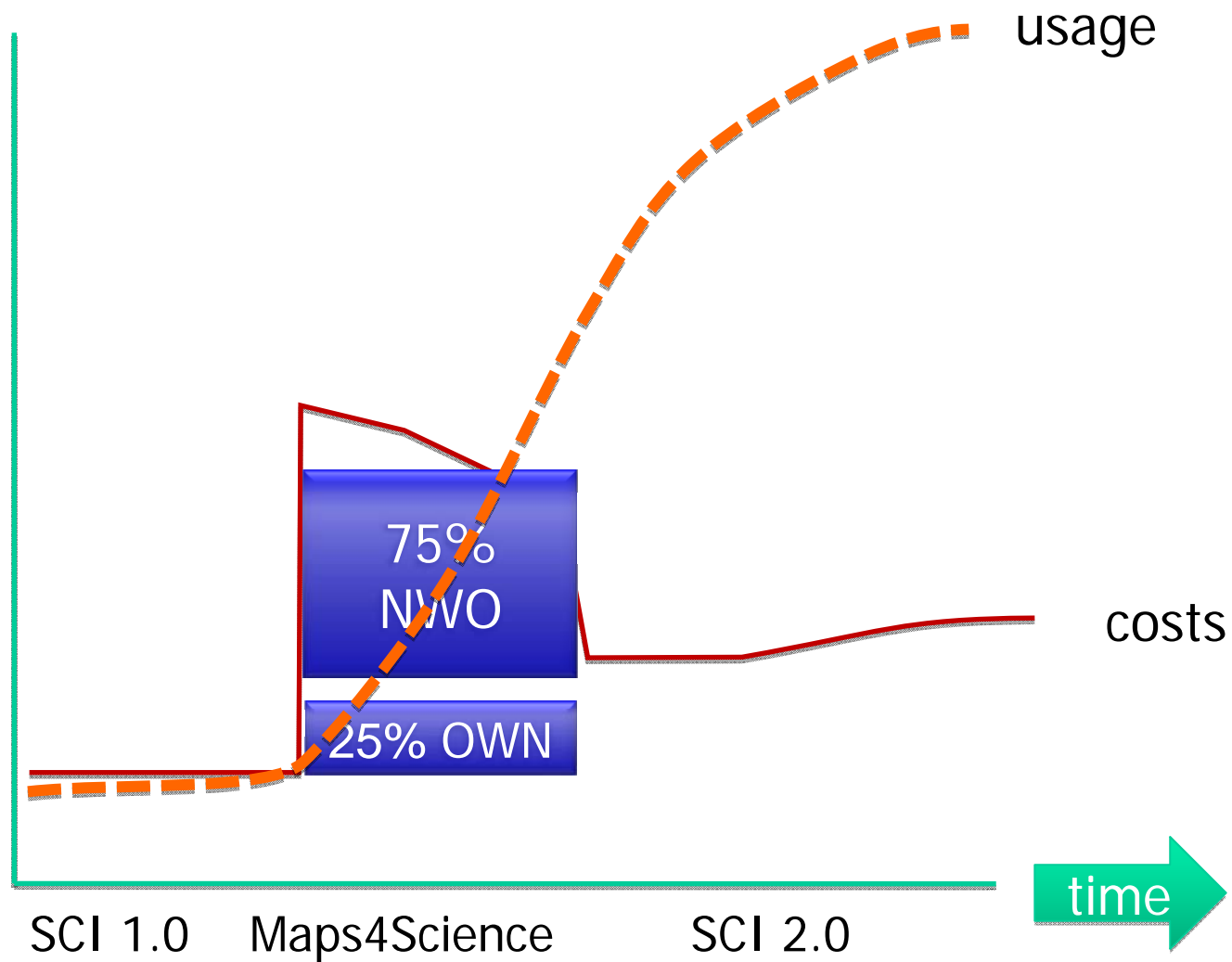


M4S Management structure

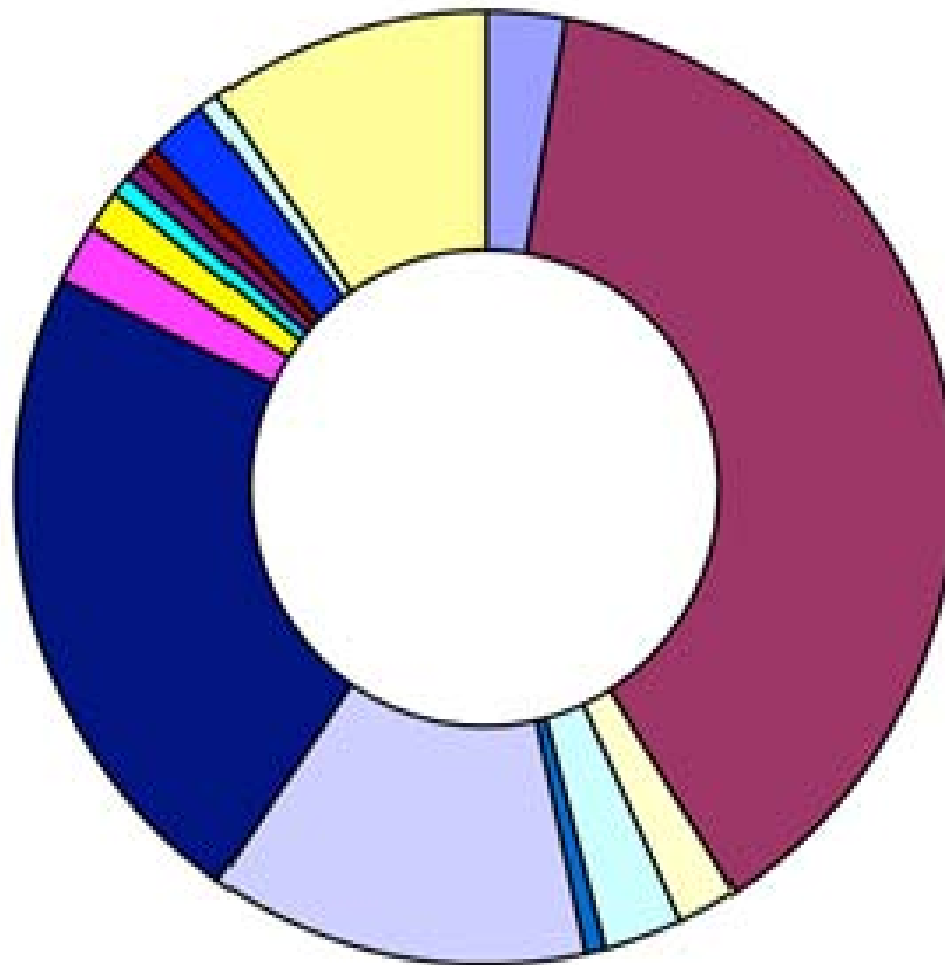


Inspiration:
- Clarin
- Parelsnoer
- Bsik/RGI

M4S future



User Disciplines



- Agriculture, food, and forestry
- Architecture and planning
- Biological sciences
- Business and management studies
- Communication and media studies
- Creative and performing arts
- Education and research methods
- Engineering
- Geography and environment
- Humanities
- Law
- Mathematics and computer science
- Medicine including dentistry
- Modern languages and area studies
- Nursing, midwifery and allied health
- Physical sciences
- Psychology
- Social sciences
- Veterinary medicine
- Other

source: <http://edina.ac.uk/impact> (geology digimap)



Spatial data for all of science

with location as the linking pin

preparing for the geodata flood

enabling Dutch scientific breakthroughs

Maps4Science consortium representatives



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Prof. Dr. Ir. A K (Arnold) Bregt
Professor Geo-information Science

Wageningen University
Centre for Geo-Information



Dr. P K (Peter) Doorn
Director

Data Archiving and Networked Services
(DANS)

Interview: presenters of scientific use cases



1. WATER RESOURCES

Prof. dr. ir. Nick van der Giessen
Delft University of Technology
Water Resources Management

Director
Delft Research Initiative Environment

Modelling complex water resources systems



2. CRIME

Prof. dr. Marianne Junger
Twente University
Social Safety Studies

Board
Bureau HALT Nederland

Multidisciplinary Research crime prevention



3. HEALTH

Prof. dr. Peter Sloot
University of Amsterdam
Computational Science

St. Petersburg State University
Advanced Computing

Modelling epidemiology of infectious diseases



4. CULTURAL HISTORY

Prof. dr. Henk Scholten
Free University of Amsterdam
Spatial Informatics

Co-Founder and CEO
Geodan

Application of Geographical Information Systems