



# Research Data Infrastructures

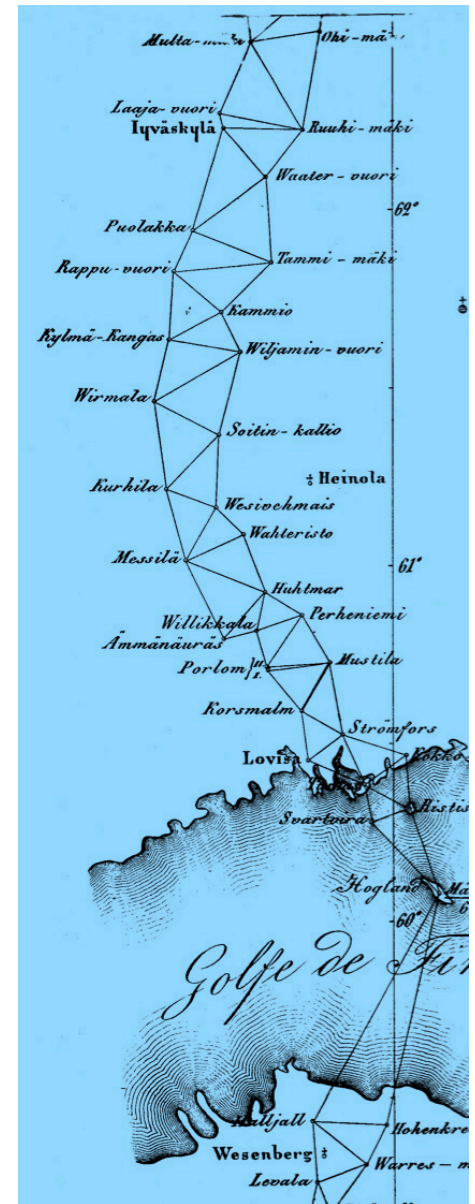
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27.9.2012 - Visit of National Science and Technology Library, PRC

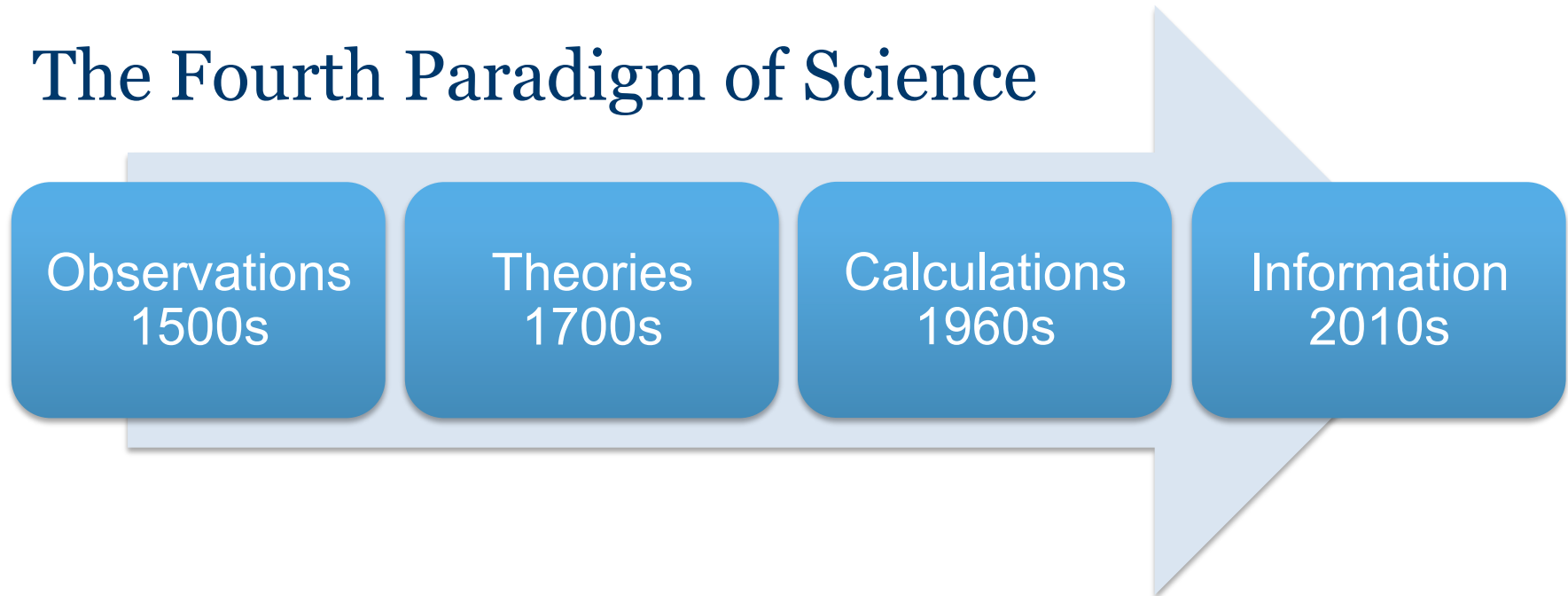
Hora diei <i>h</i>	Jul. <i>e</i> Millim.	Aug. <i>e</i> Millim.	Sept. <i>e</i> Millim.
merid.	10,40	11,16	9,64
1	10,01	10,76	9,53
2	9,81	10,72	9,40
3	9,63	10,52	9,31
4	9,72	10,66	9,35
5	9,85	10,76	9,50
6	10,01	11,01	9,59
7	10,07	11,03	9,62
8	9,69	11,03	9,58
9	9,97	10,79	9,43
10	9,95	10,63	9,12
11	9,85	10,32	8,89
12	9,74	9,98	8,45
13	9,72	9,90	8,25
14	9,66	9,83	8,11
15	9,72	10,08	8,11
16	9,85	10,40	8,31
17	10,01	10,70	8,63
18	10,23	11,23	8,89
19	10,52	11,55	9,25
20	11,05	11,84	9,70
21	10,70	11,87	9,81
22	10,67	11,88	9,94
23	10,45	11,58	9,87

# What is Research Data?

- Data that is produced during a research
  - Observation, measurements
  - Documentation, interviews, questionnaires
  - Language corpuses, etc.
- Data that can be used in research
  - Data from other research projects
  - Statistics, registers, catalogues, etc.



# The Fourth Paradigm of Science



# Problems of Research Data Today

## Problems of Research Data

- Unorganized
- Often deleted after research
- Hard to find
- Hard to re-use

## Reason of These Problems

- Researchers do not merit from research data management
- They do not have adequate storage space, management tools, etc.
- Little standardization, common practices, etc.



# Finnish Vision of Good Research Data Governance

## Policy:

- Finland has a national research data policy.

## Services:

- Policy is supported by common digital services.

## Access:

- Data created with public funding is accessible for research.

## Funding:

- Long-term stable funding for research data infrastructures.

## Academic Merits:

- Researchers merit from research data output.



# Research Data Policy

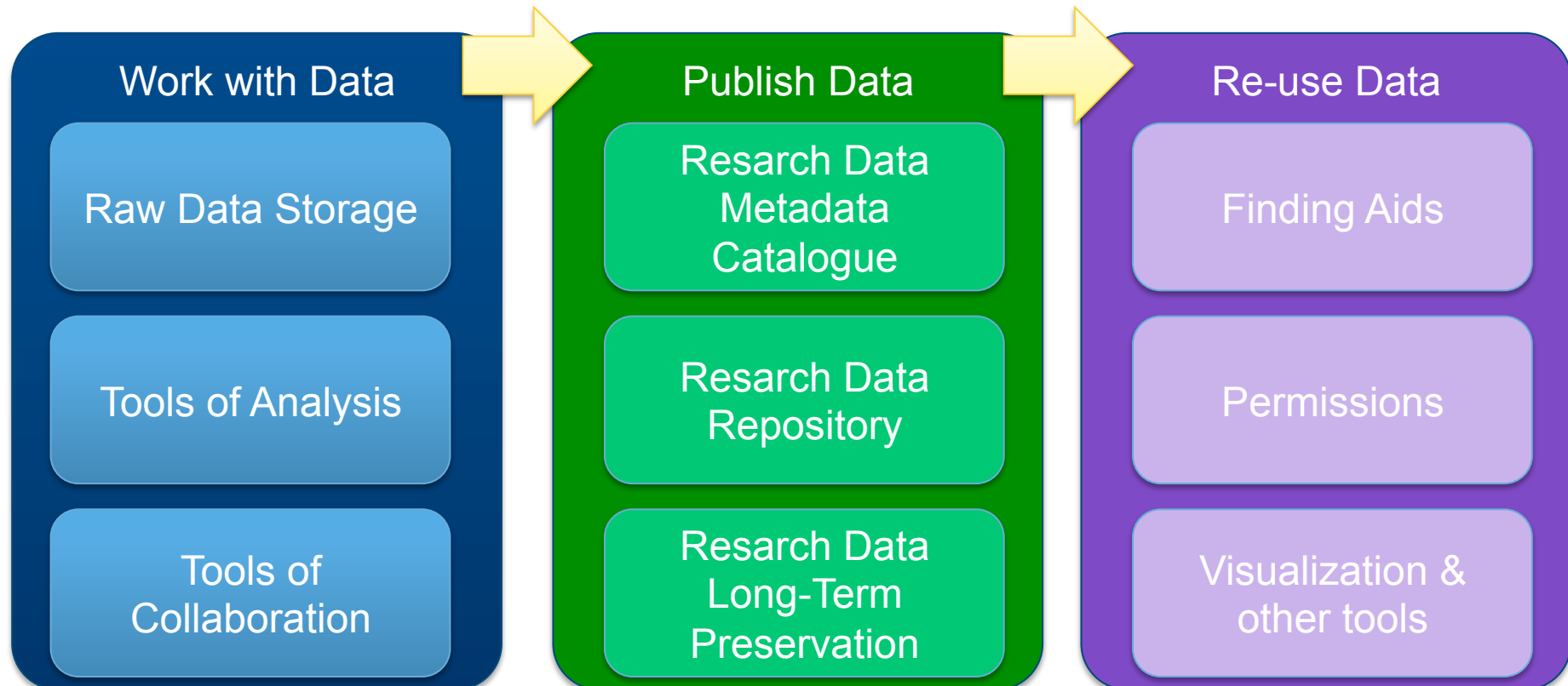


FINNISH GOVERNMENT  
Valtioneuvosto Statsrådet



- Government-level decisions on general principles
  - Current Government Programme:
    - “Information resources produced using public funding will be opened up for **public and corporate access**
    - in an **easily reusable format**”.
- (<http://valtioneuvosto.fi/hallitus/hallitusohjelma/en.jsp>)

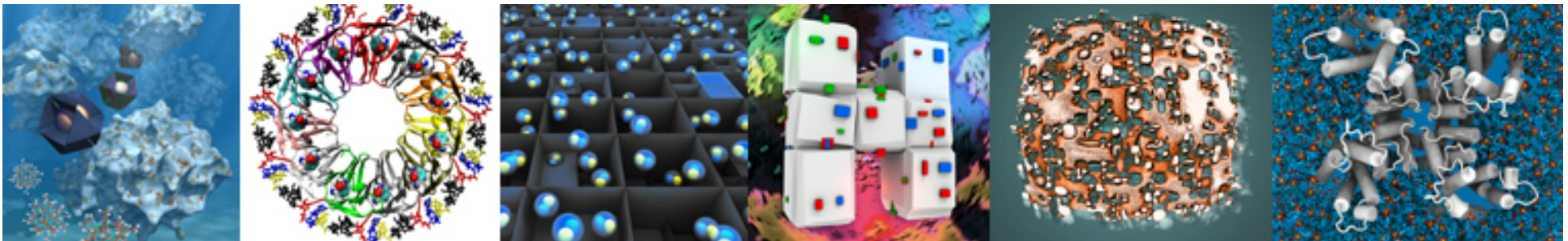
## Access & Services



## Existing Services

National Services by CSC – IT Centre for Science; <http://www.csc.fi>

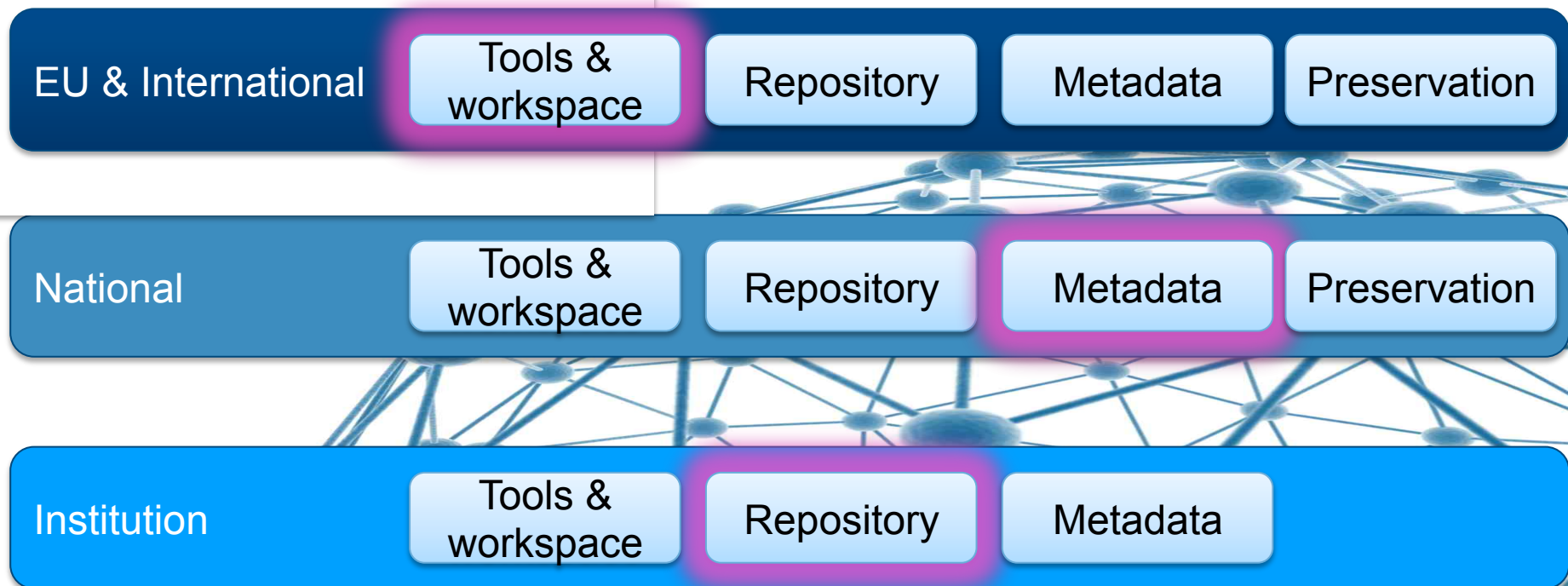
- Research Data Storage Service
- Application Services – analysis tools
- Authentication Service (universities & research institutions)

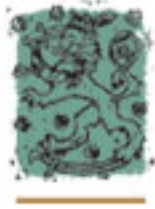


NATIONAL LIBRARY NETWORK SERVICES



# Easy for Researcher – Seamless Interoperability between Service Providers





## Research Data Project 2012 - 2014

- Metadata Working Group
  - Recommendations on Metadata
- Data Infrastructure Working Group
  - A proposal for a national research data infrastructure
- Long-Term Preservation Group
  - Will build on National Digital Library outcomes,  
<http://www.kdk.fi/en/long-term-preservation>
- Public Data Registries Group
  - Plans how to better open public data resources for research



THE NATIONAL  
LIBRARY  
OF FINLAND