

COST Action CA15110

CHARME - *Harmonising standardisation strategies to increase efficiency and competitiveness of European life science research*

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Combined CHARME, EMBnet, NETTAB 2016 Workshop



CHARME is supported by the EU
Framework Programme Horizon 2020
COST Action Ca15110



THE CHARME ACTION

- WHAT
- WHY
- HOW



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About COST

The longest-running
European framework for
“European Cooperation in
Science and Technology”

Mission

“COST aims to enable breakthrough scientific developments leading to new concepts and products. It thereby contributes to strengthening Europe’s research and innovation capacities”

To achieve its mission, COST endeavors to:

- **Build capacity** by connecting high-quality scientific communities in Europe and worldwide
- **Provide networking opportunities**
- **Increase research impact on policy makers, regulatory bodies and national decision makers** as well as on the private sector



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CHARME

Countries

March 2016 - April 2020

Supporters at proposal stage:

- In total 64 supporters
- 23 EU countries
- 13 associated non-EU countries

Current status:

- 28 countries signed for CHARME
- 2 pending for signature



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Why CHARME ?



Problem of current life science research

- 80-90% of the research data are **not re-usable or accessible** [1]
- There is a crisis in **data reproducibility** [2]

Reasons:

- Data are not shared via (public) repositories
- Appropriate metadata missing
- Information missing about experiments
- Data formats are not appropriate

1) *DFG, German Research Foundation evaluation*

2) *Nature's survey on reproducibility in research (Bakern M, Nature (533) (2016): 452-454*

Problem of current life science research

- Standardisation Initiatives & Organisations are currently working largely independently from each other

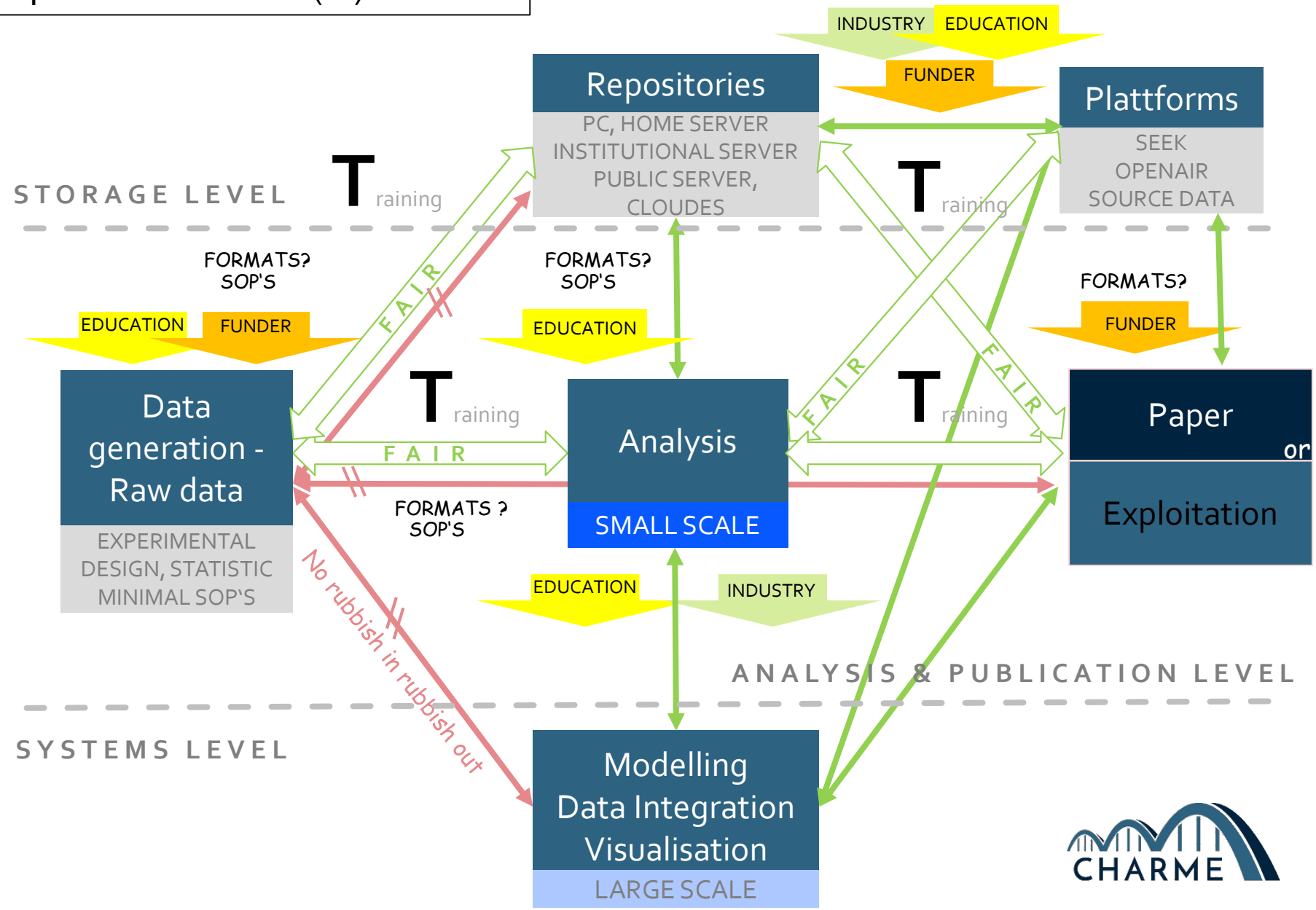


Source: modified from a presentation of J. Lonien, DIN

Problem of current life science research

- The available tools and legislation on standards and Standard Operating Procedures (SOPs) are still not:
 - Sufficiently comprehensive
 - Efficient
 - Harmonised
 - Adopted by the communities

Needs and requirements along the pipeline of acquisition of data to (re)use



Destination of data

We need to consider what are potential destinations of our data

Repositories and Platforms

e.g. SEEK, OpenAIRE, Data Journals

Systems Biology approaches

Integration and modeling

Publications / Journals

...and need to identify (minimal) requirements for respective standards and formats

Where do we come from?



CHARME is based on the work and outcomes of different European Initiatives (among others)



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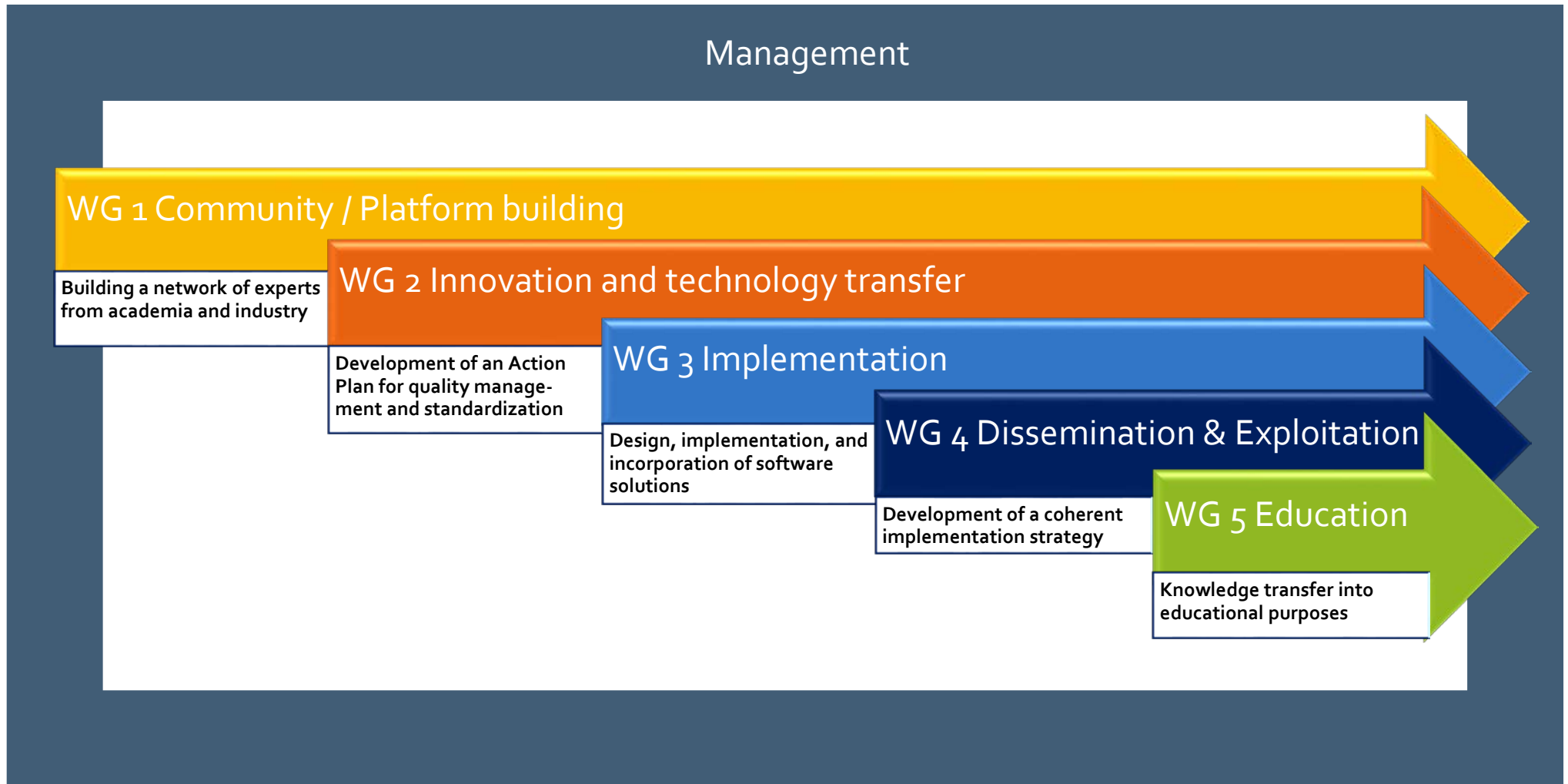
AIM & primary objectives

CHARME aims to **bridge and combine** the fragmented areas of the of various moves in the development of new norms and standards to achieve a breakthrough in standardisation efforts.

CHARME will **identify needs and gaps**, teaming up with other initiatives and organisations to avoid duplication and overlap of standardisation activities.

CHARME will **develop** a common, **coordinated, long-term strategy**, by active involvement of all stakeholders (from research, industry and policy), to successfully assimilate standards into the daily work-flow.

5 interacting Working Groups



Aims of CHARME in this workshop

- to involve the bioinformatics community
- know each other
- exchange ideas
- involve in CHARME those of you that would be happy to join and collaborate





<http://www.cost-charme.eu/>

Contacts:

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* Present and available to talk with you

**THANK YOU
FOR YOUR
ATTENTION**



First Management Committee Meeting
Brussels, Belgium, 21/03/2016