

Legal issues of distributed Research infrastructures

What is a distributed research infrastructure?

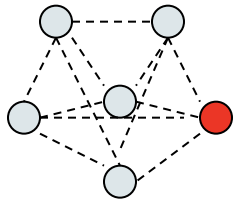
ESFRI

- When a research infrastructure is structured with *more than one site* it can be defined as a distributed infrastructure.
- A European distributed infrastructure is a *singular* research infrastructure, having a *unique name and legal status*, etc.

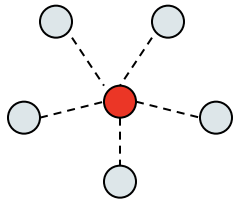
ERIC Council regulation

Art 2 (definitions): ... Such infrastructures may be ‘single-sited’ or ‘distributed’ (an organised network of resources)

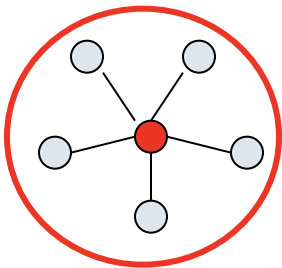
Models of distributed research infrastructures



Loose interconnected network nodes.
One (or a few) nodes support the coordination of common operations.

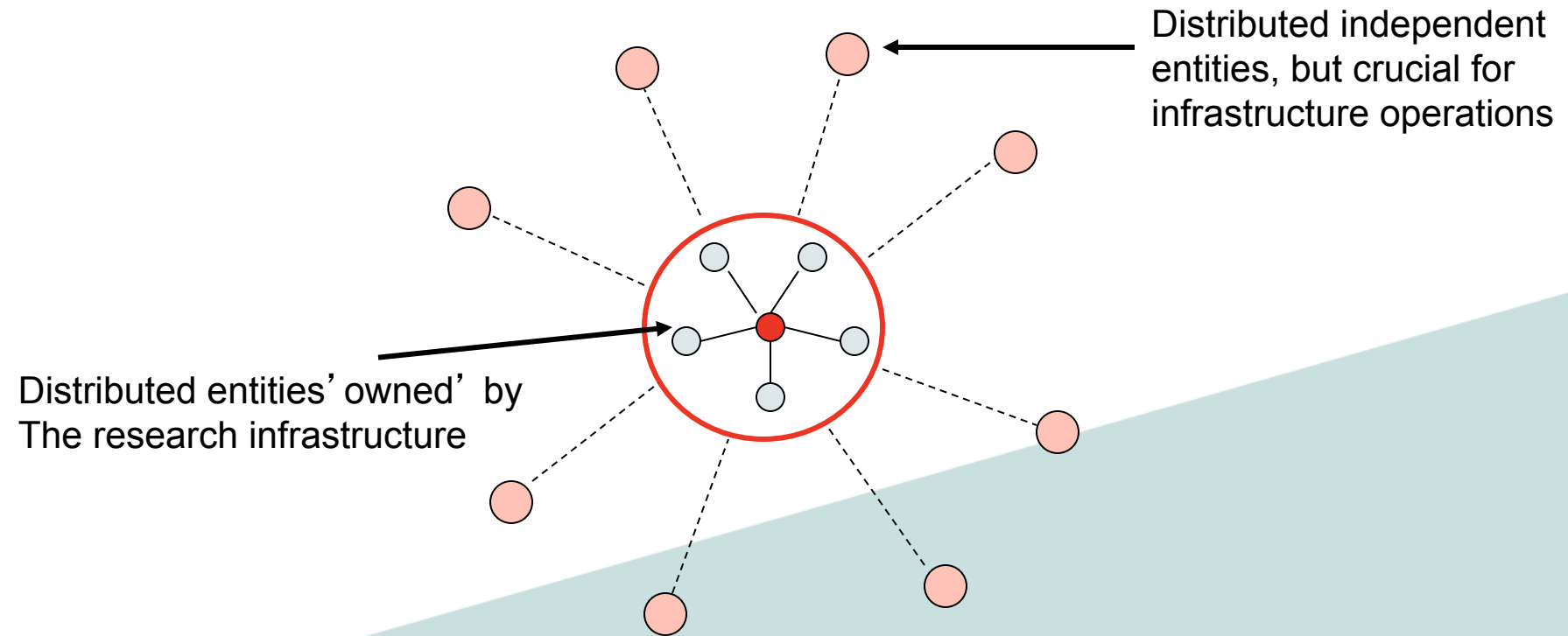


Hub and spokes with dependent operational relations.
But spokes are not necessarily “owned” by the hub.
Often e-Infrastructures.

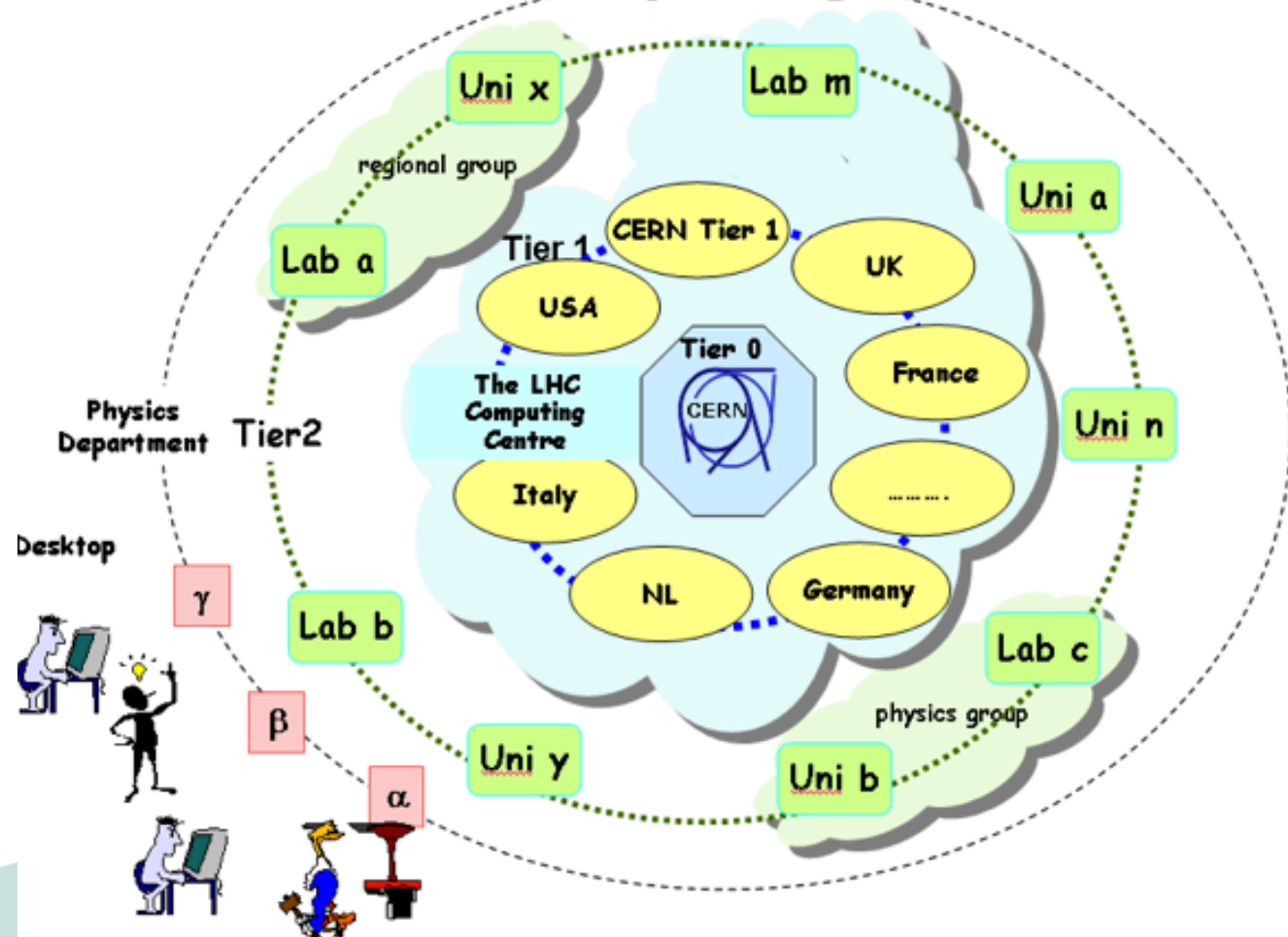


Multiple sites infrastructure, with different places of operation
and a coordinating mechanism.

Mixed model

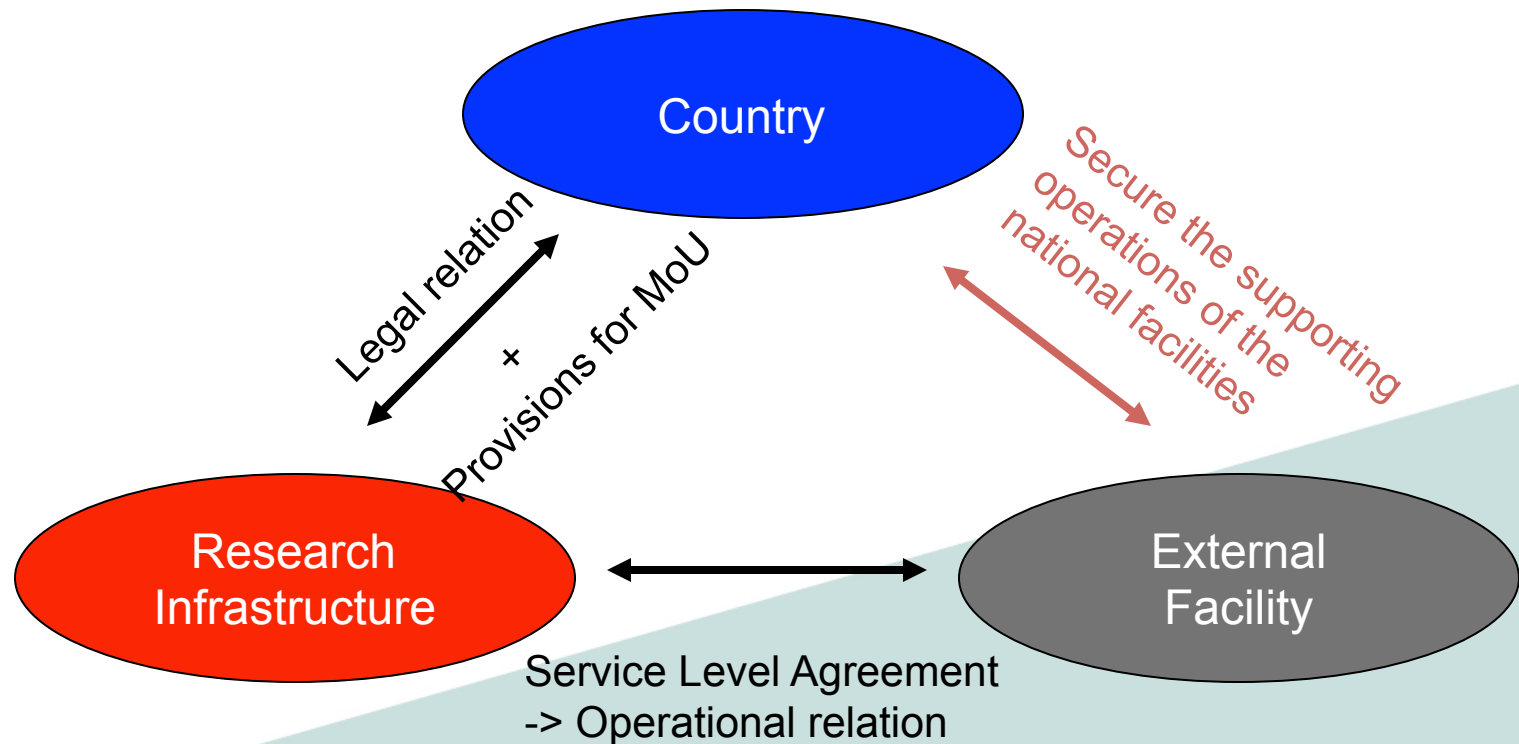


LHC Computing Model

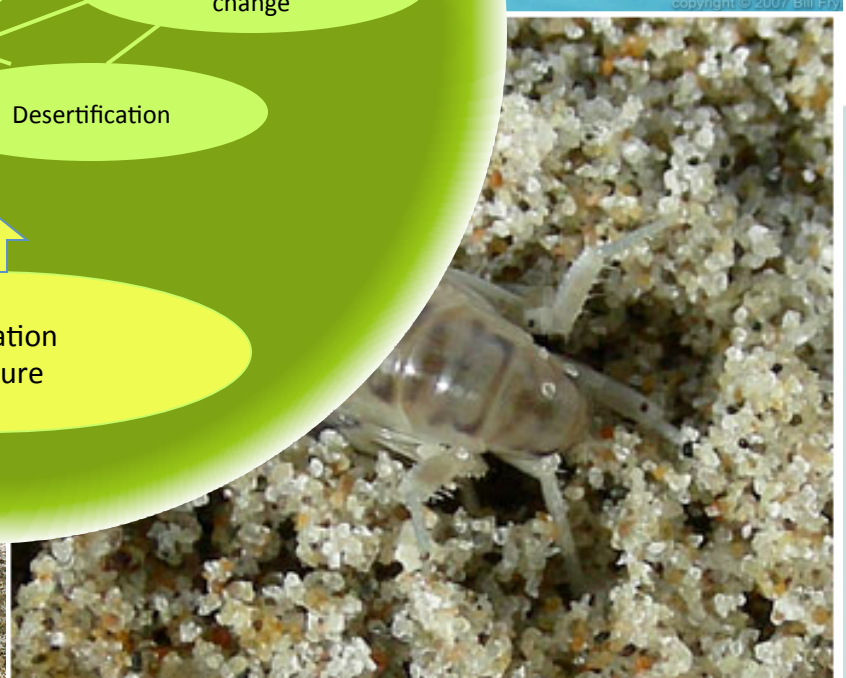
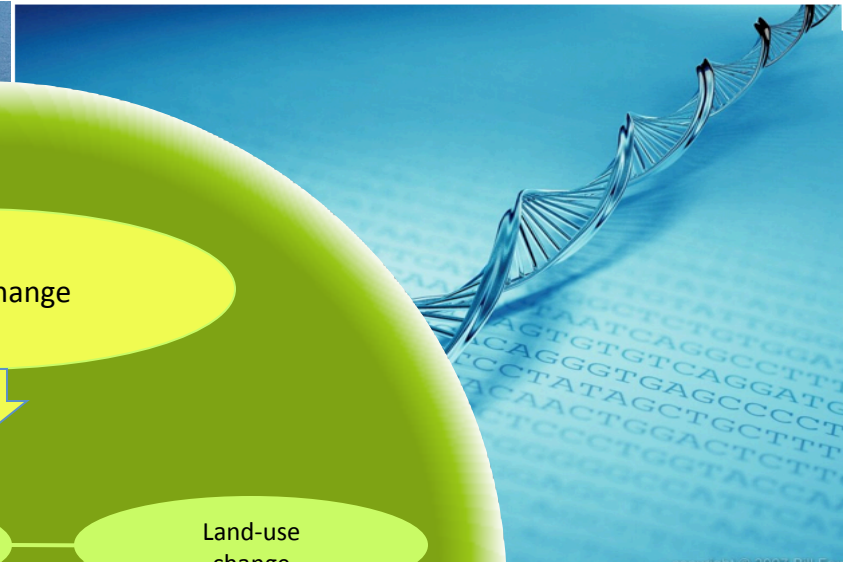
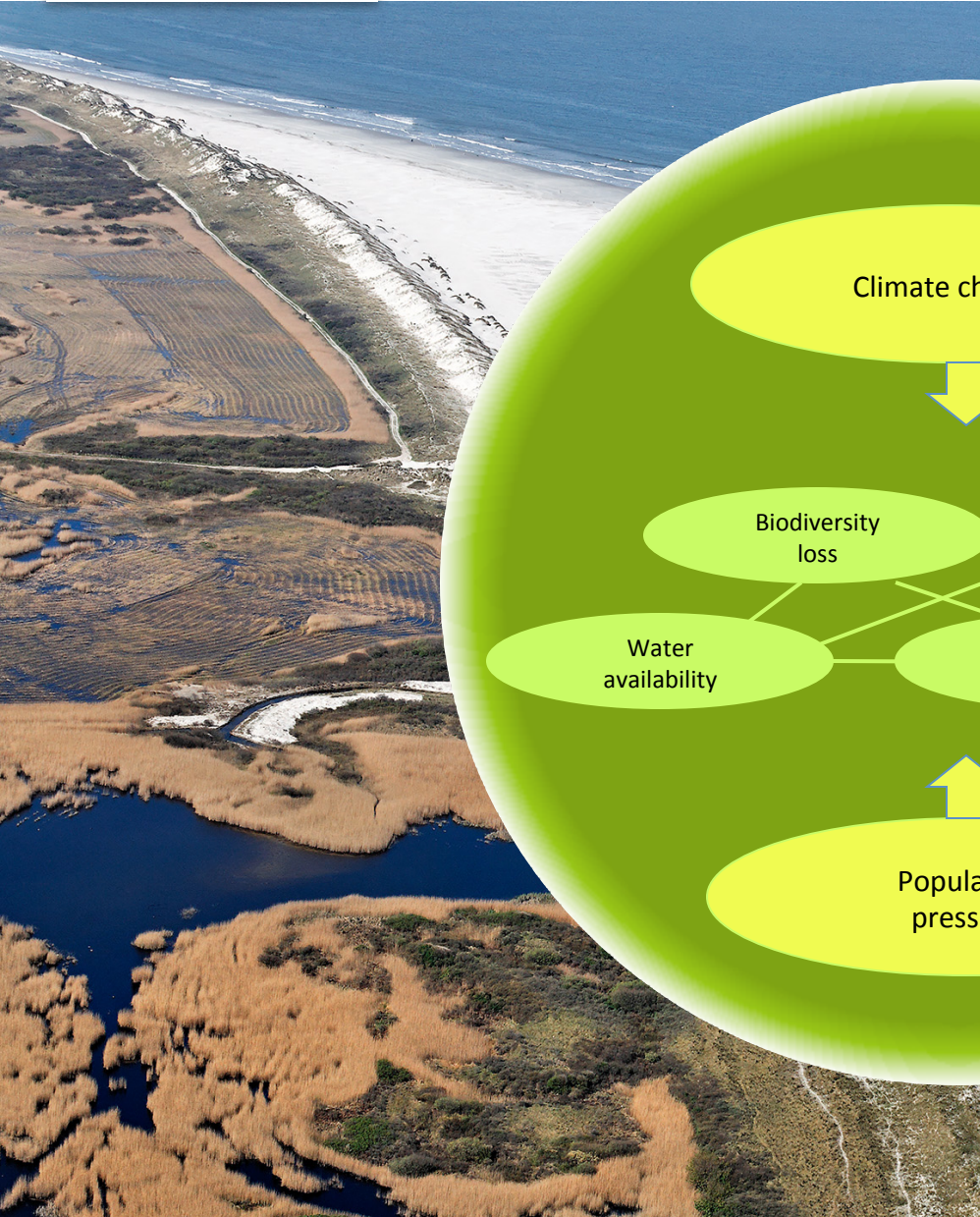
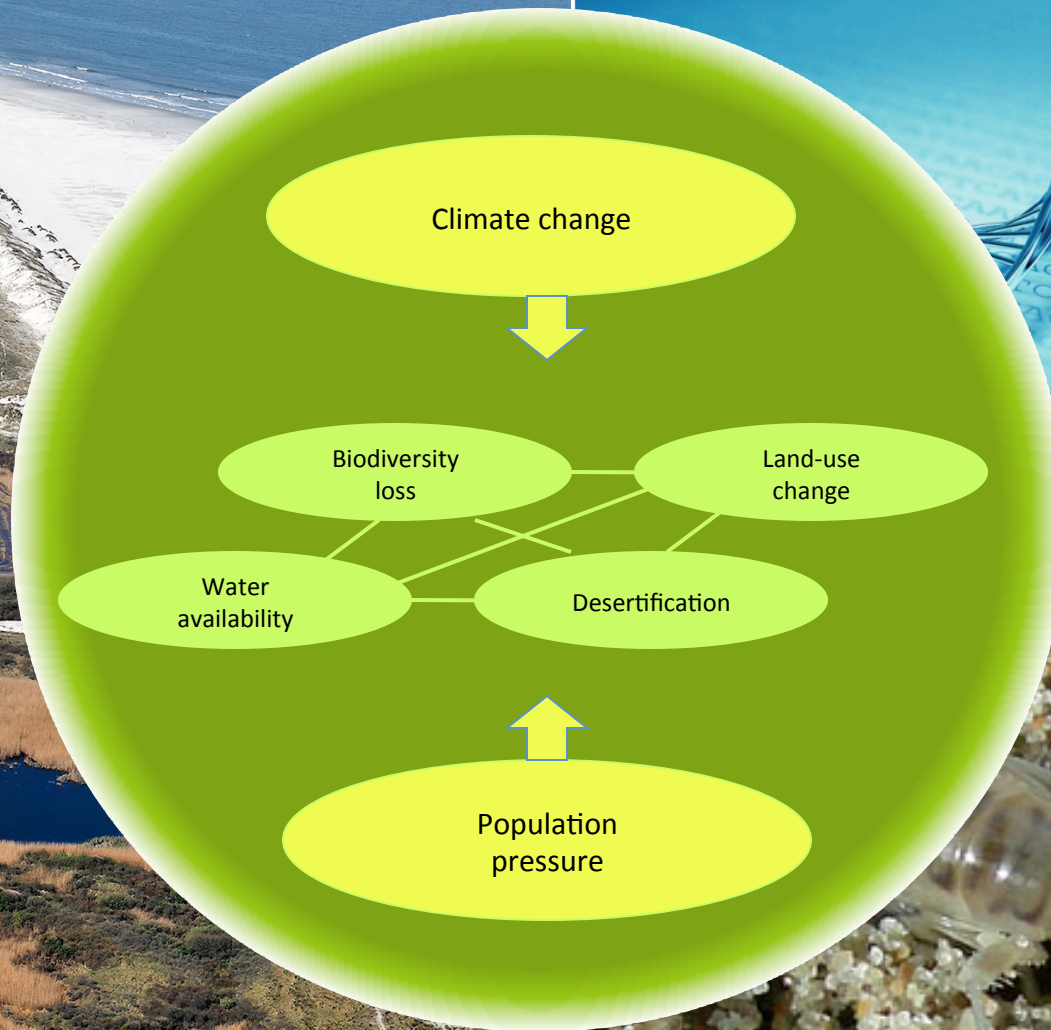


e-infrastructures especially often depend on the operations of other facilities, not necessarily part of the infrastructure's legal entity.

How to regulate crucial relations with 'not owned' facilities?

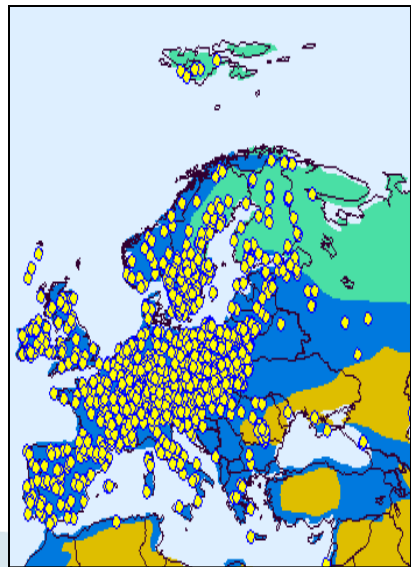


The case of LifeWatch: biodiversity research infrastructure

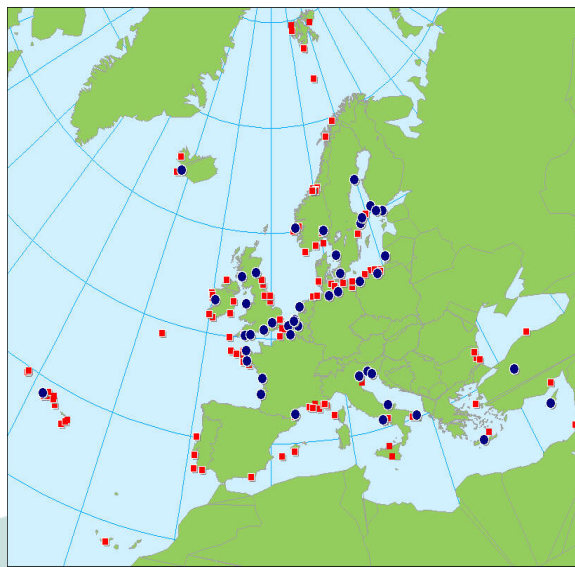


Distributed data generation

Terrestrial
monitoring



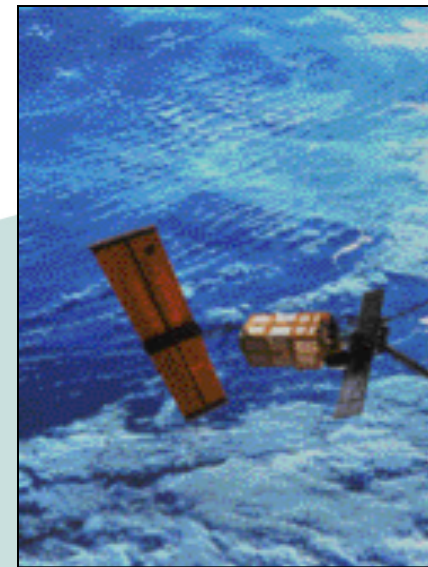
Marine
monitoring



Natural science
collections



Earth
observation



Applications



Analysis/
Modelling



Data integration



Data management



Data generation
(digitizing; sampling;
sensing)

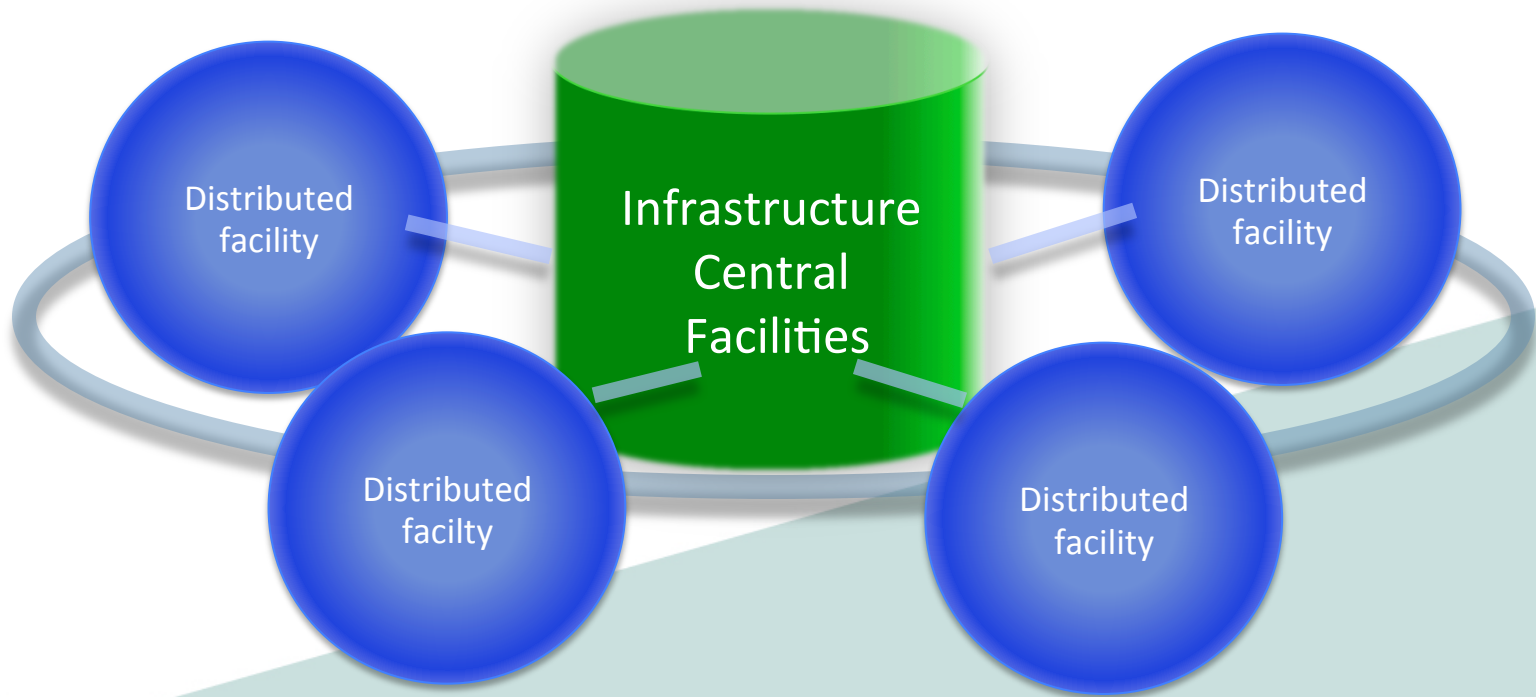
Research
Infrastructure

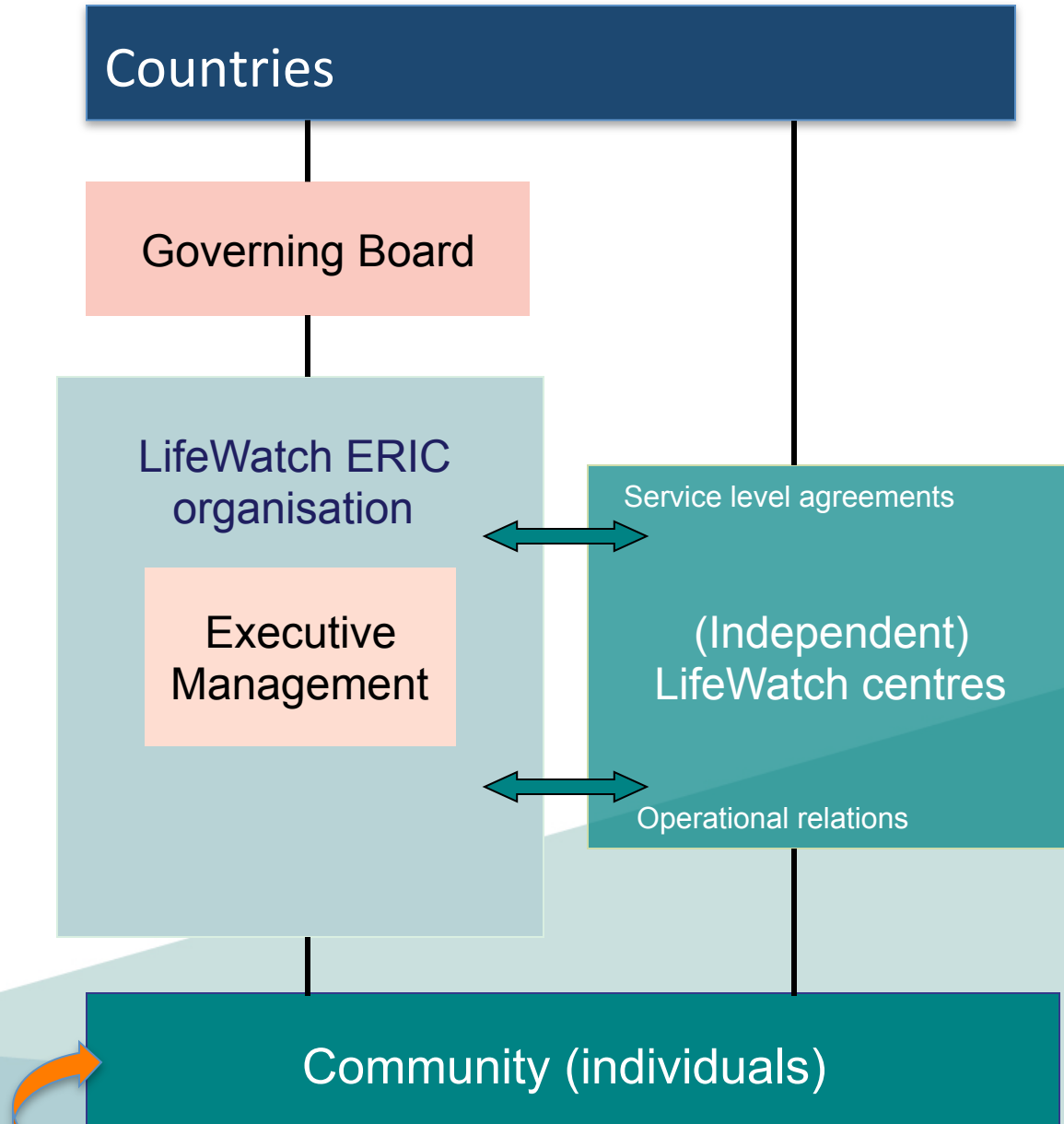
Data filtering
in national
computing centres

Distributed
(independent)
Data generators

Large Hadron Collider
case

LifeWatch case





“Apache” model, formalizing community power