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#### **WORKING DOCUMENT**

From:	General Secretariat of the Council
To:	ERAC (European Research Area and Innovation Committee)
Subject:	European Research Infrastructures : Digital Transition - PPT presentation

Delegations will find attached PPT on the above mentioned subject displayed at the meeting of the European Research Area and Innovation Committee (ERAC) on 13 - 14 September 2022.



### Context

- A well-functioning European ecosystem of research infrastructures, integrating European large-scale research infrastructures and complementary national, mid- and small-sized research infrastructures allows to:
  - ensure scientific excellence;
  - address major scientific, environmental and societal challenges;
  - underpin industrial value chains
- RIs advanced in digital transition
  - operation, instrumentation access and services, data and results
  - users of and providers to EOSC
  - rely on European and national digital infrastructures
- Challenge: a systemic approach at EU level to ensure economies of scale, avoid duplication of efforts, strengthen interoperability building on investments

## 1 - Fostering and accelerating the digitalisation of research infrastructures

- Digital transition has multiple dimensions
  - digitalisation of instrumentation, remote access and remote operation
  - integration of data and information from RIs e.g. in digital twins
  - technology development
  - Skills and training

 Analysis of the needs, priorities, competitiveness issues and associated resources and steps in the short- and longer-term



# 2- Fostering interconnection of digital and research infrastructures

- A well-established physical and digital infrastructure landscape at European and national levels based on major investments
- Coordination and interconnection between existing digital and research infrastructures, including through the EOSC ecosystem
  - improving quality and relevance of available services, avoiding duplication
- Overall aim for:
  - Future physical/digital interconnection by design at various levels
  - User-driven digital developments based on RI roadmaps and relying on EOSC interoperability requirements

### 3- Strengthening the interface between ESFRI and EOSC

• ESFRI RIs generate/process big data and need data-intensive capacities: data providers and users of EOSC data and services

- Interface between ESFRI and EOSC:
  - cooperation between ESFRI and EOSC facilitating coherent and complementary strategies as well as joint activities when appropriate
  - Shared input to respective ESFRI strategy (including roadmap process) and EOSC Strategic Research Agenda also ensuring operational consistency

