The European Research Area: 20 years on

Successes

- 37 **Research Infrastructures** implemented with close to 20 billion euro in investment

- 7 billion euro in **joint programmes** between Member States

- Better **research careers**: Charter and Code for Researchers, EURAXESS

- European **Open Science** Cloud

Points for improvement

- **3% target** not reached, lagging in private investment, public investment stagnated

- Significant **divides in R&I performance** across the EU

- More ambitious **policy reforms**

- Need to improve on **translating R&I results to the economy and to support the transition and the recovery**

- Progress to **gender equality** has been slow: only 24% of top positions in higher education sector are occupied by women

- Better involvement of **citizens and society**

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Delivering on the transitions and the recovery

- Europe faces **societal**, **ecological and economic challenges**, aggravated by **#coronavirus** → it is high time to retool ERA so that it delivers on **Europe's recovery** to:

Accelerate the twin green and digital transition

and new solutions in areas such as the decarbonisation of industry or sustainable mobility

Next Generation EU

Strengthen resilience and crises preparedness

health, digital, socio-economic and climate R&I are essential

Support Europe's competitive edge

in the global race for knowledge and tech sovereignty in cybersecurity, space, AI, 5G and e-mobility

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Improving Research and Innovation system

❑ Careers of researchers

❑ Researchers' mobility & attracting talent

❑ Strengthening the innovation ecosystem

❑ Cooperation academia-industry

❑ R&I infrastructures

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Research infrastructures play a central role

Research infrastructure ecosystem:
- Resources and services for researchers and industry
- European AND national infrastructures
- Equipment / sets of instruments
- Collections, archives, datasets
- Computing networks
- Communication systems
- Single sited, distributed, virtual
- ...

- Curiosity driven frontier research
- Supporting innovation
- Creating (open) data
- Education
- Researcher careers
- Integrated in regional innovation hubs
- Pan-European networks

Contribution to EU key objectives:
- Green Deal (e.g. battery alliance)
- Recovery and Resilience (e.g. R&I services)
- Response to pandemics (e.g. COVID19 data platform)
- ERA objectives (e.g. education, innovation)
- EC priorities (e.g. open data platforms, innovation)

Financing of research infrastructures

- The research infrastructure (RI) programme of Horizon Europe funds activities to ensure:

  - joint planning and deployment of upgrades & new facilities;
  - access for researchers across the EU, and training in RI services;
  - continuous improvement of their services and align their offer to better tackle societal challenges;
  - networking of national and European RIs;
  - that European RIs continue to develop jointly services to achieve strategic objectives;
  - national commitment and sustainable funding for RI operation;

- Funding opportunities for RIs are not limited to Pillar 1 of Horizon Europe. Missions, clusters, and partnerships in Pillar 2 provide numerous additional possibilities.

- The RI programmes do NOT fund the construction of new RIs. National budgets and/or ESIF are committed to pay for construction.
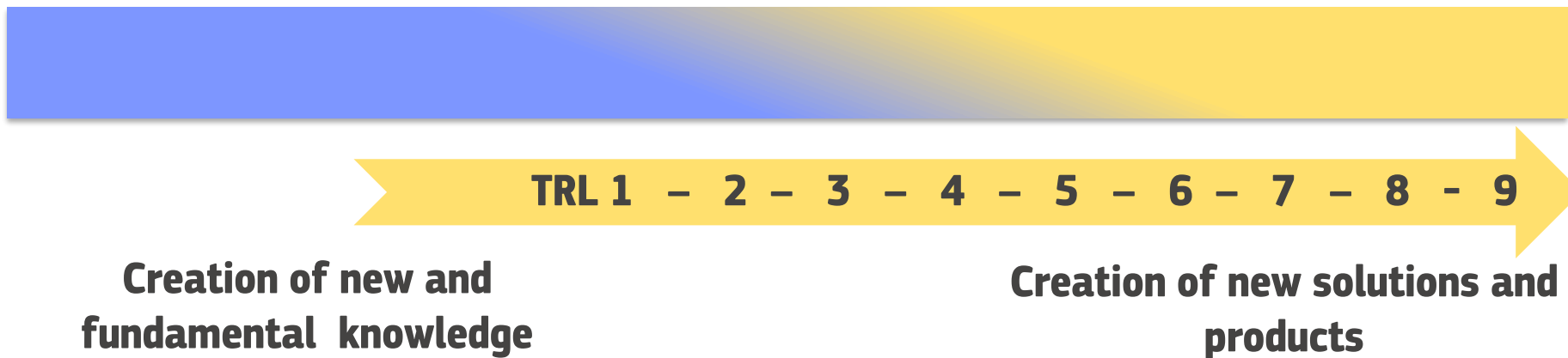
A new approach to knowledge creation and innovation

- The ERA calls for Europe to become more agile in **translating R&I results into the economy** and enhancing the take up and visibility of research results in the society as a whole.

- The new approach needs to be based on reinforced and new ways of collaboration between research infrastructures (including national ones), technology infrastructures, industry/SMEs, education, and society.

- The EU needs to make full use of its excellent research and innovation results to support the twin green and digital transition of EU economy.

- We need to support efforts to anchor research and technology infrastructures more firmly in existing or new regional knowledge and innovation hubs, in alignment with Smart Specialisation Strategies.

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Providing a continuity of services across all Technology Readiness Levels

Research Infrastructures

Technology Infrastructures

TRL 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 - 9

Creation of new and fundamental knowledge

Creation of new solutions and products

- We want to create an integrated European technology infrastructure landscape where industry and SMEs can find and access bundled services to test, validate and up-scale their ideas, bringing them into the market.

- We want to ensure that a continuity of services is available along the entire value and knowledge creation chain, fully integrating services from research infrastructures and technology infrastructures.

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A NEW ERA FOR RESEARCH AND INNOVATION

For more information please see:

Press release

Factsheet

Video: 'The new European Research Area'

Communication: A new ERA for Research and Innovation

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THANK YOU

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