Setting the scene
Vision and Mission

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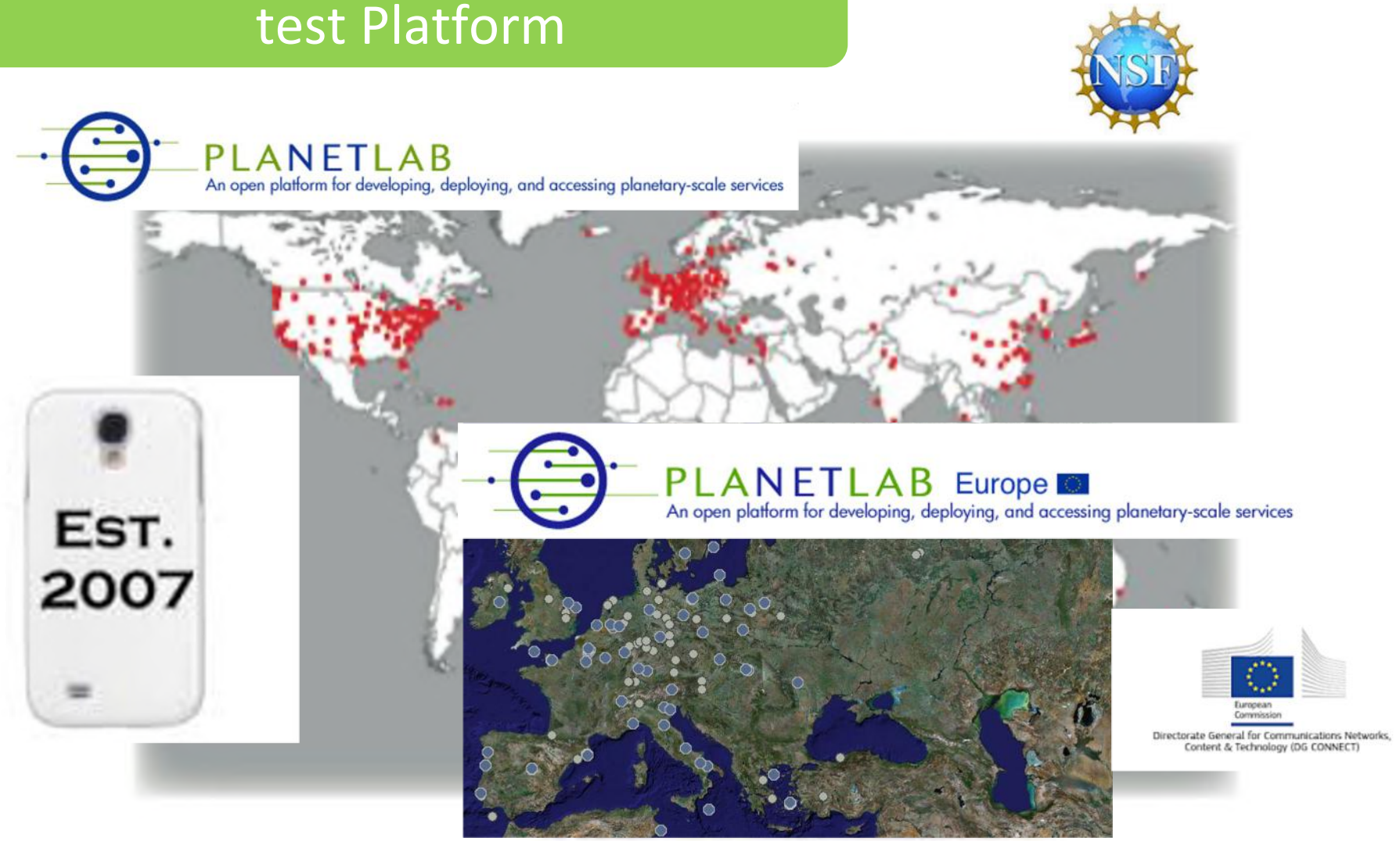
IoT Week

June 23, 2022

Past and present, Lessons learned

Building a First Large Internet test Platform



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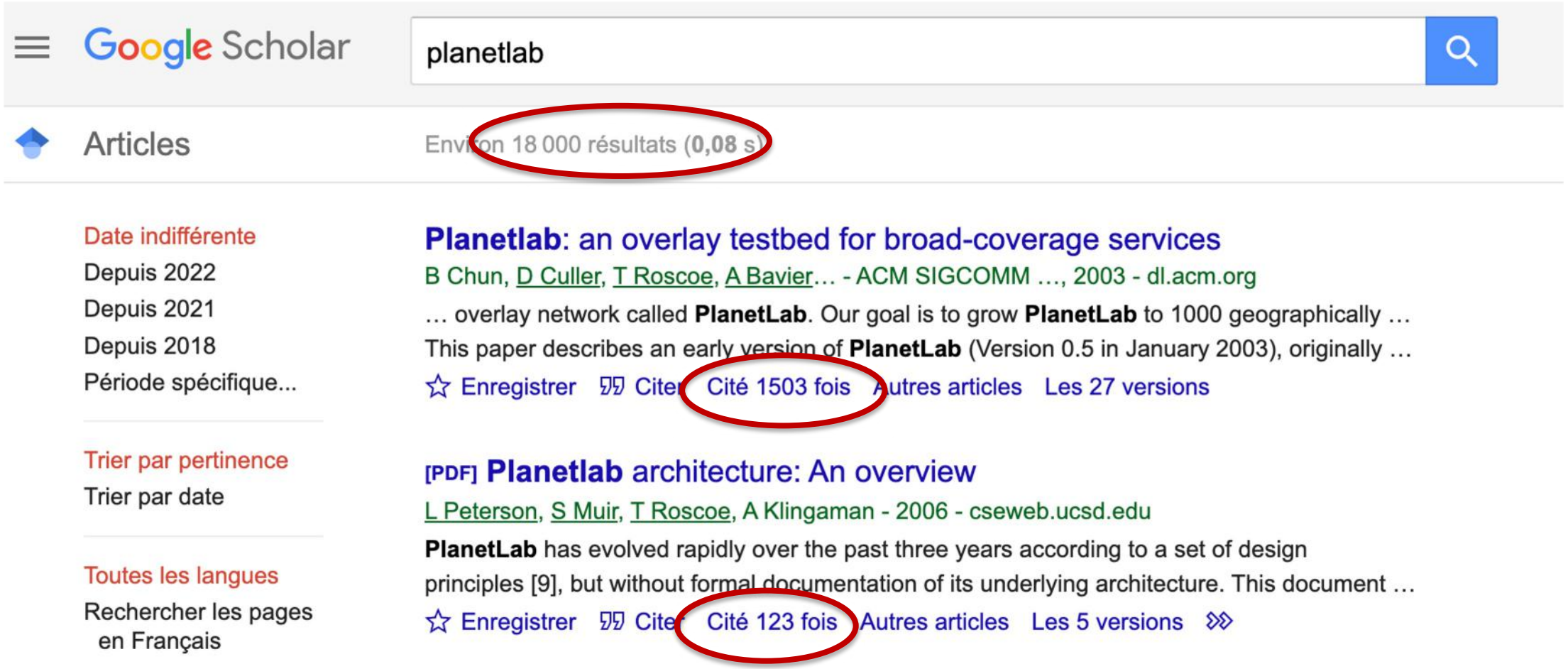
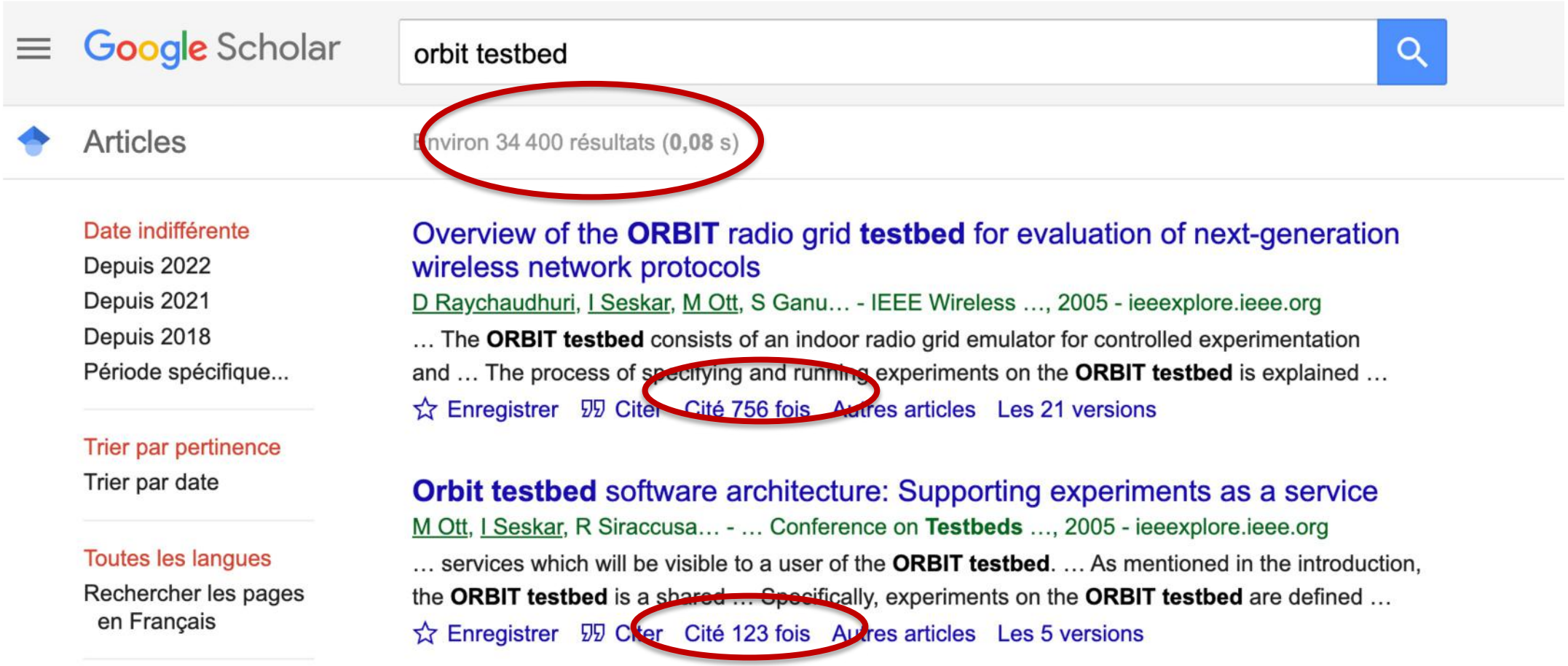
Open-Access Research Testbed for Next-Generation Wireless Networks (ORBIT)

Impact assessment

Planetlab cited in more than 18,000 publications



ORBIT testbed cited in more than 34,000 publications



A global initiative towards ICT Test Platforms

- **NSF GENI**
  - 2008-2016
  - 120 M$
- **NSF TIPOFF**
  - 2017-2020
  - 10 M$
- **NSF CloudLab & Chameleon**
  - 2013-2018
  - 20 M$

- **EU FIRE (inc. Fed4Fire)**
  - 2007-2020
  - 200 M€

Directorate General for Communications Networks, Content & Technology (DG CONNECT)

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Fully Controllable, programmable Virtualized Digital Infrastructure Test Platforms

USA NSF PAWR (Platforms for Advanced Wireless Research): NSF + Industry, 100M€, 2017-2022

NSF Fabric: NSF, 20 M€, 2019-2023

Colosseum: NSF-DARPA, 20+7,5M$, 2017-2025.

BRIDGES: NSF, 2.5M€, 2021-2024

EU Horizon Europe
ICT 17-19-52
2018-2022, x M€

China CENI
Chinese Experimental National Infrastructure
2018-2022
190 M€

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Important “competition”

Large Scale Infrastructures as a support to the design and validation of systems

- ACM SigComm scientific publications
- See Facebook Terragraph Lab

ONAP
OPEN NETWORK AUTOMATION PLATFORM

O-RAN
ALLIANCE

Lessons learned

Previous and current generations are successful but however,

- Not recognized
- Not sustainable

Change the narrative

- Federation is not transformative
- Science driven

ESFRI SLICES

- On the ESFRI Roadmap 2021
- New generation

Research Infrastructures as a Scientific Instrument

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June 23, 2022

ESFRI

MAKING SCIENCE HAPPEN

A new ambition for Research Infrastructures in the European Research Area

The European ESFRI framework

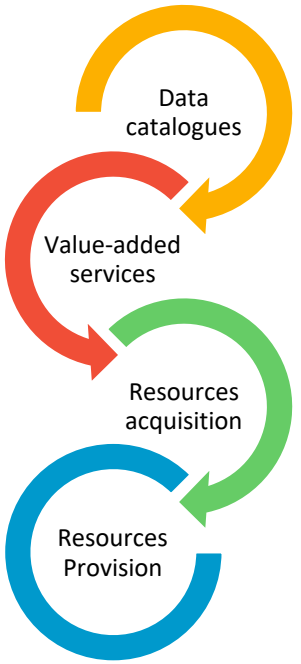
European Strategy Forum on Research Infrastructures

http://www.esfri.eu/

SLICES in a nutshell
Entered the ESFRI Roadmap 2021

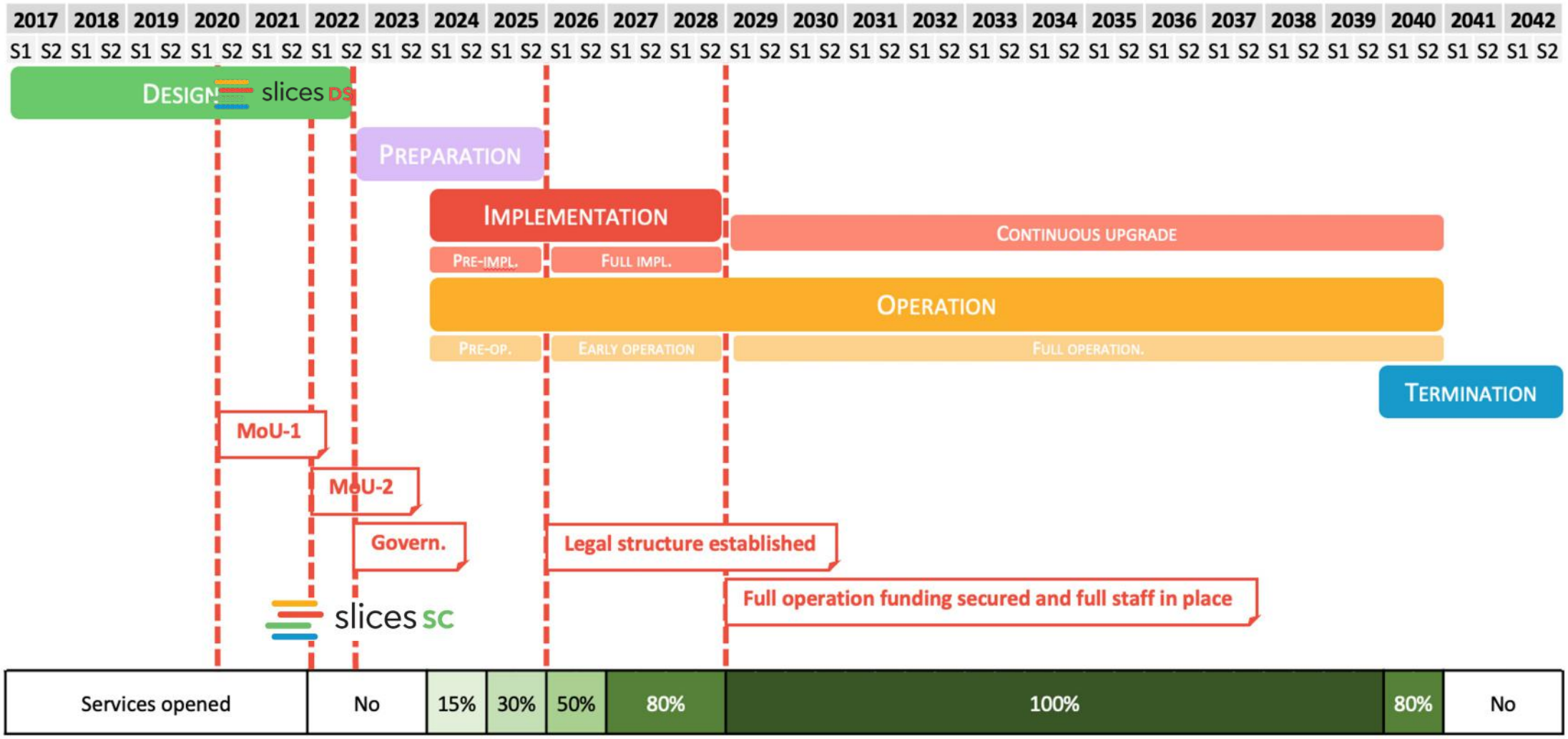
what we offer

- Launched in 2017, **SLICES** is an **RI** to support the **academic and industrial research community** that will design, develop and deploy the **Next Generation** of **Digital Infrastructures:**
  - **SLICES-RI** is a **distributed RI** providing several **specialized instruments** on challenging research areas of Digital Infrastructures, by **aggregating** networking, computing and storage **resources** across countries, nodes and sites.
  - ***Scientific domains***: networking protocols, radio technologies, services, data collection, parallel and distributed computing and in particular cloud and edge-based computing architectures and services.



www.slices-ri.eu

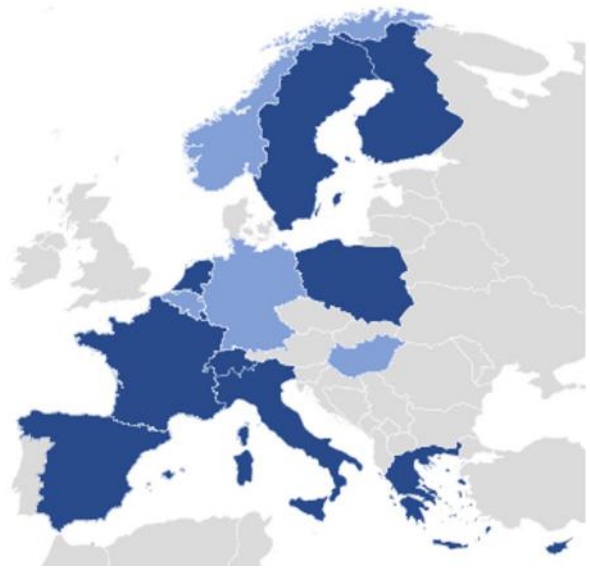
SLICES timeline



FED4FIRE

2012-2022

Current status of the partnership



SLICES
ESFRI successful application – 2020

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Countries	Government	Research and Academia		Industry	Clusters, networks and others	NRENs	Worldwide support
	National support	Partners	Support				
Core partners							
	Flemish conditional support + Walloon financial support to a linked project						
	Local support confirmed						

Fully Controllable, programmable Virtualized Digital Global Infrastructure Test Platform

SLICES Full research lifecycle
Open data & Reproducibility

Thanks for your attention

For more information, please contact:
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