



Research Infrastructures for the Future of Ukraine

Roadmap for Sustained Growth and Recovery

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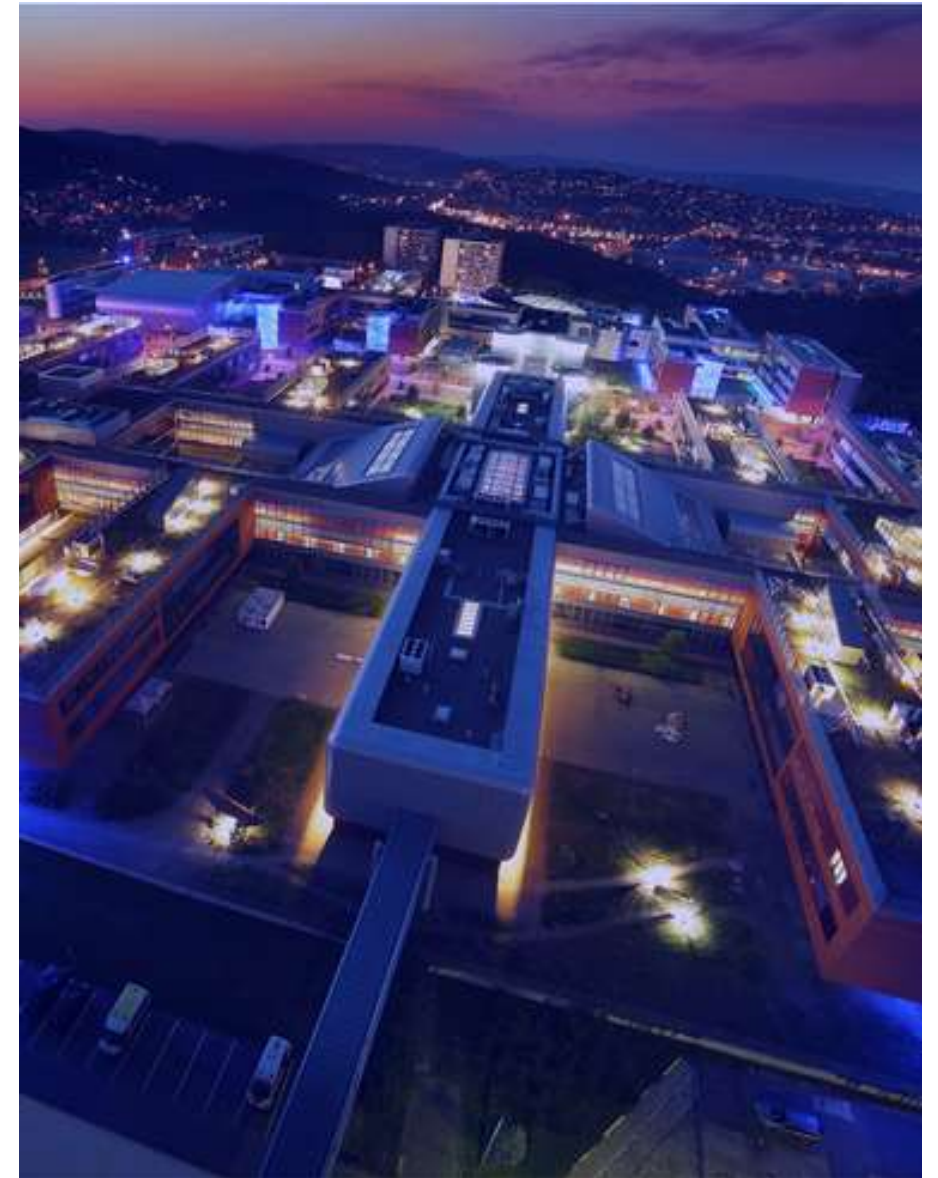
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<https://riff.muni.cz/>



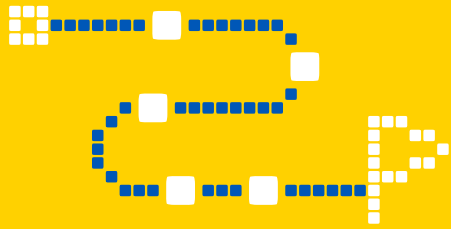
Funded by
the European Union

Introduction

- Title: Research Infrastructures for the Future of Ukraine: Roadmap for Sustained Growth and Recovery (RIFF)
- Starting date: 1. 9. 2025
- Duration: 36 months
- Budget: 2 million EUR



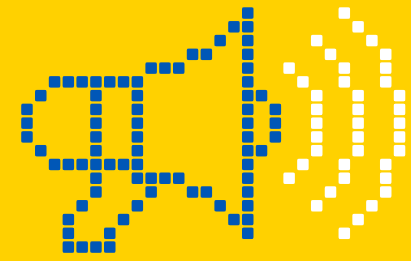
Objectives



1 Developing
a Roadmap



2 Building RI
Community
in Ukraine

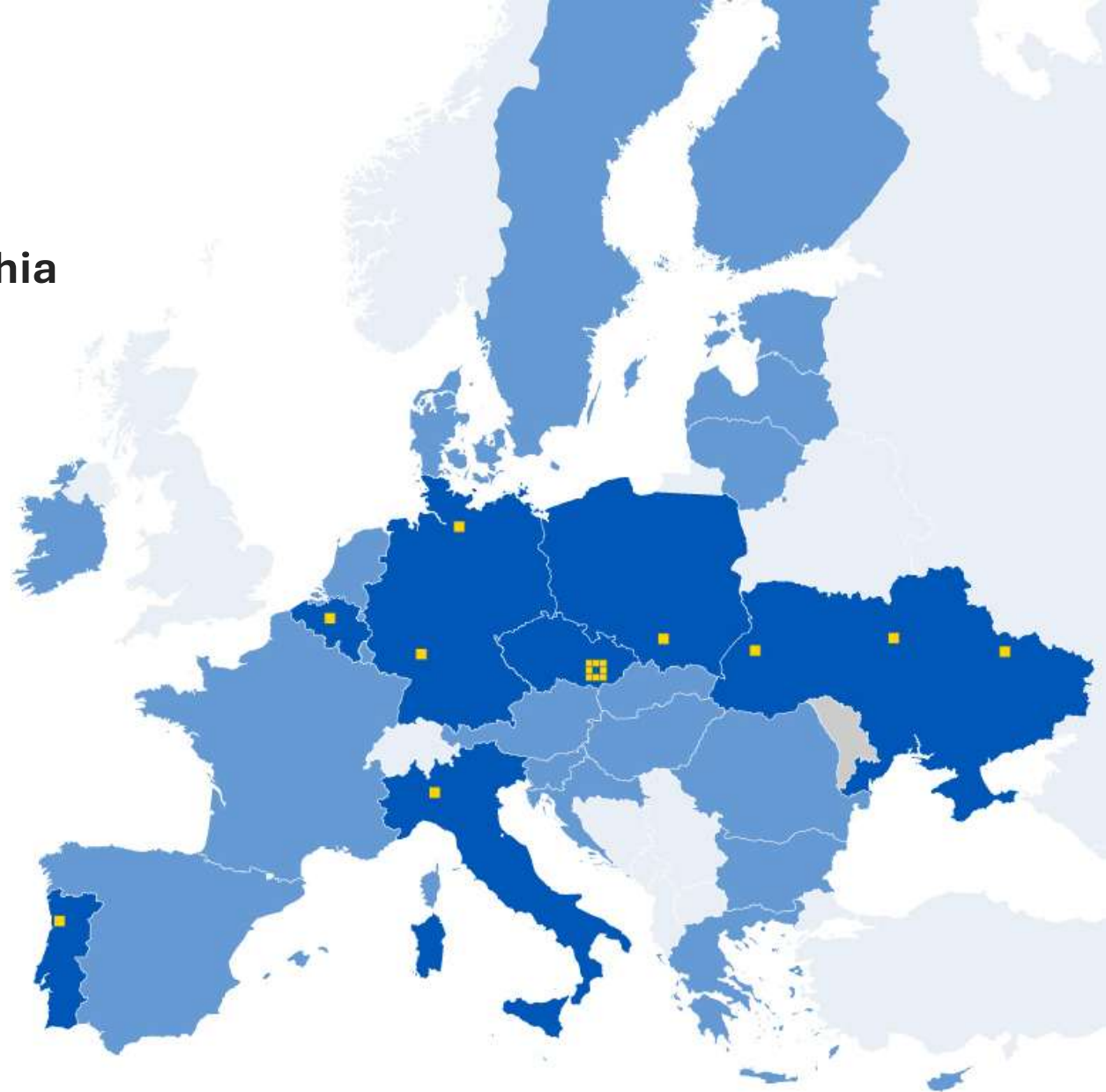


3 Promotion of
the Roadmap

Partners

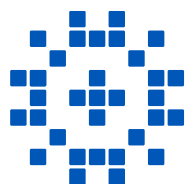
COORDINATOR: Masaryk University (MUNI), Czechia

- Deutsches Elektronen-Synchrotron (DESY), Germany
- European Future Innovation System Centre (EFIS), Belgium
- Leibniz Institute for the Social Sciences (GESIS), Germany
- Institute of Molecular Biology and Genetics NASU (IMBG), Ukraine
- Institute of Systems and Computer Engineering (INESC), Portugal
- Kyiv Academic University (KAU), Ukraine
- Kharkiv Institute of Physics and Technology (KIPT), Ukraine
- Lviv Polytechnic National University (LPNU), Ukraine
- National Academy of Sciences Ukraine (NASU), Ukraine
- National University of Kyiv-Mohyla Academy (NaUKMA), Ukraine
- National University of Life and Environmental Sciences of Ukraine (NUBIP), Ukraine
- Jagellonian University (SOLARIS), Poland
- University of Milano-Bicocca (UNIMIB), Italy
- (Associated) National Research Foundation of Ukraine (NRFU), Ukraine

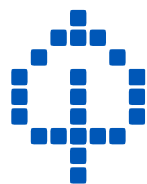




Capacity Building Aligned with the Six ESFRI Domains



**Physical
Sciences
& Engineering**



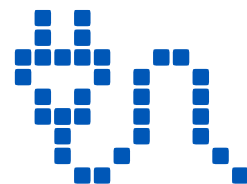
Environment

MUNI

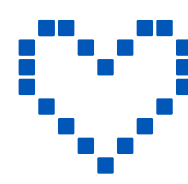


**Data
Computing
& Digital**

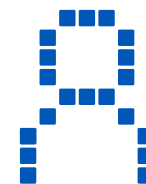
MUNI



Energy



**Health
& Food**



**Social
Sciences
&
Humanities**



RIFF Open Call for Research Infrastructures

Bottom-up activity to see interest and ambition of UA institutions to host research infrastructures

- Call opening: April 2026
- Call closing: 17 July 2026
- No funding associated if selected to roadmap
- Possibility to apply as individual institution or as a consortium (very new in UA)

RIFF Open Call for RIs – Overview

179

applications

139 existing RIs (track 1)

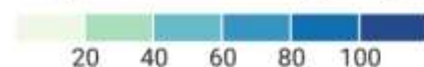
42 future RIs (track 2)

122

from

institutions

Applications by region



13

104

32



The grey colour indicates that no applications have been submitted in the region.

TOP 7 institutions based on applications submitted

- 1. Igor Sikorsky Kyiv Polytechnic Institute (8)**
- 2. National Science Center "Kharkiv Institute of Physics and Technology" (7)**
applications
- 3. Volodymyr Dahl East Ukrainian National University (6)**
4. - 7 place:
 - S.I. Subbotin Institute of Geophysics (4)
 - Lviv Polytechnic National University (4)
 - National University of Life and Environmental Sciences of Ukraine (4)
 - Sumy State University (4)

Applications by domain

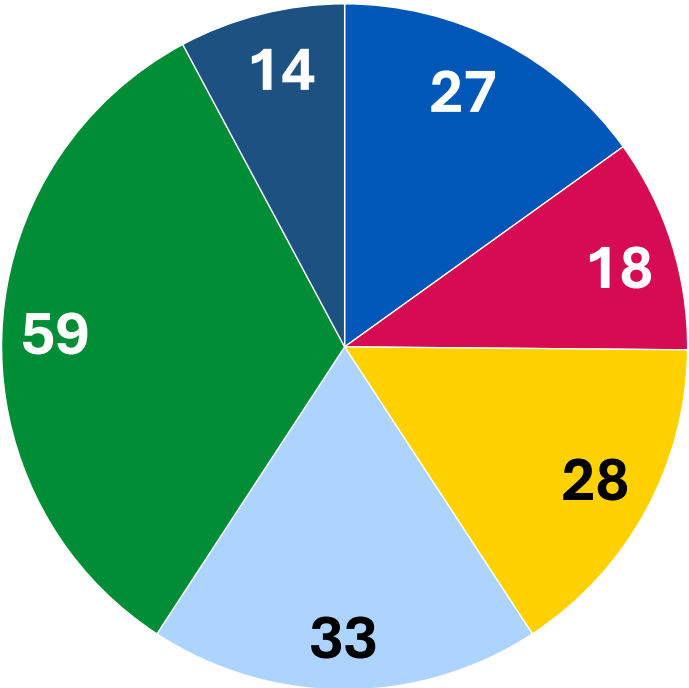
PSE is the dominant domain

Track 2 Key Findings (new Research Infrastructures):

- **H&F** has the most future RIs
- Limited plans for the creation of **ENE** RIs

Applications by domain

- DIGIT
- ENE
- ENV
- H&F
- PSE
- SSH

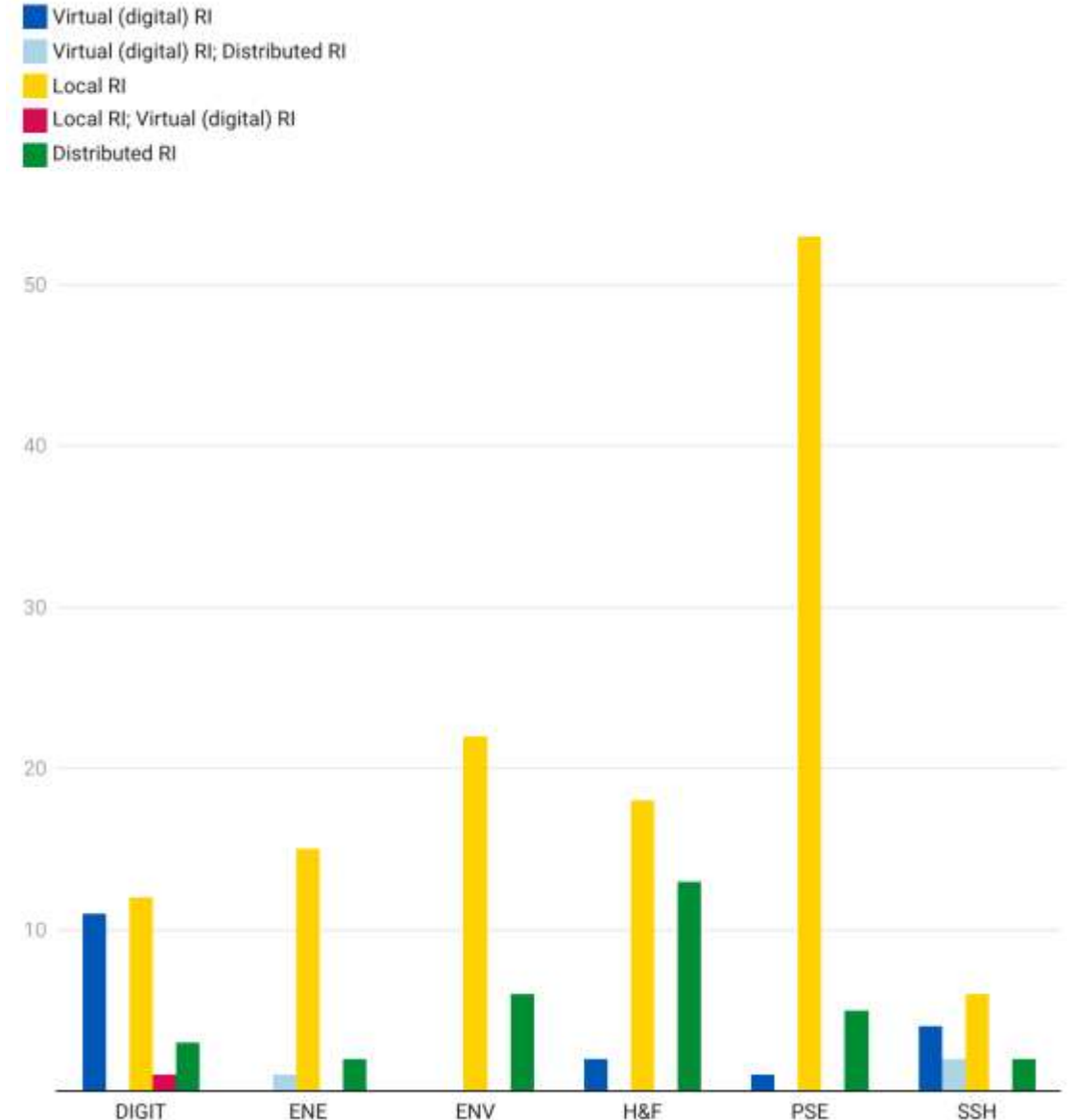


RI types

Local RIs (127 in total) dominant across domains

Distributed RIs (34 in total) is highly represented in the H&F domain (13/33), followed by ENV (6) and PSE (5).

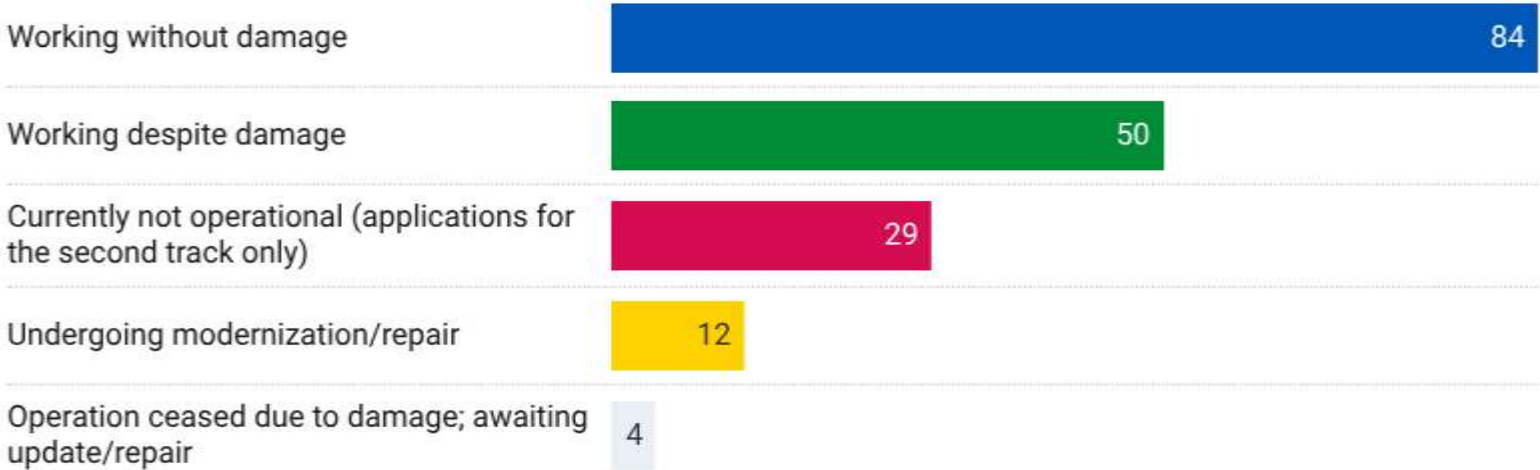
Distribution of RI Types Across Different Domains



RI Label & Operational Status of RIs

131 applicants are either centre of collective use of scientific equipment, or national key laboratory, or object of national heritage

Operational Status of the Research Infrastructures



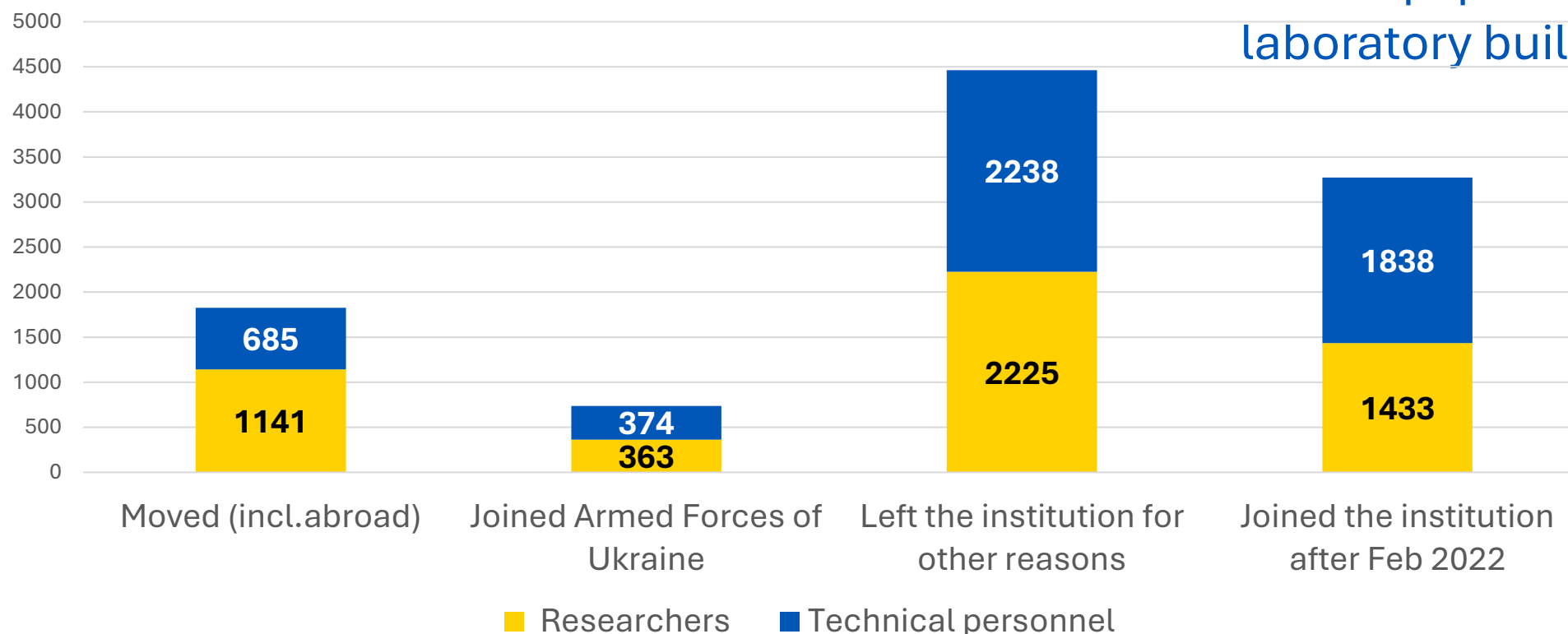
Most RIs are operating without damage

War damage

Self-reported (no cross-checking) with a margin of error (10-15%) due to double counting
Consult other reports on war damage: UNESCO/NASU

**119 out of 179 applications
provided war damage information;
data provided at the level of an
institution:**

War effects on human capital

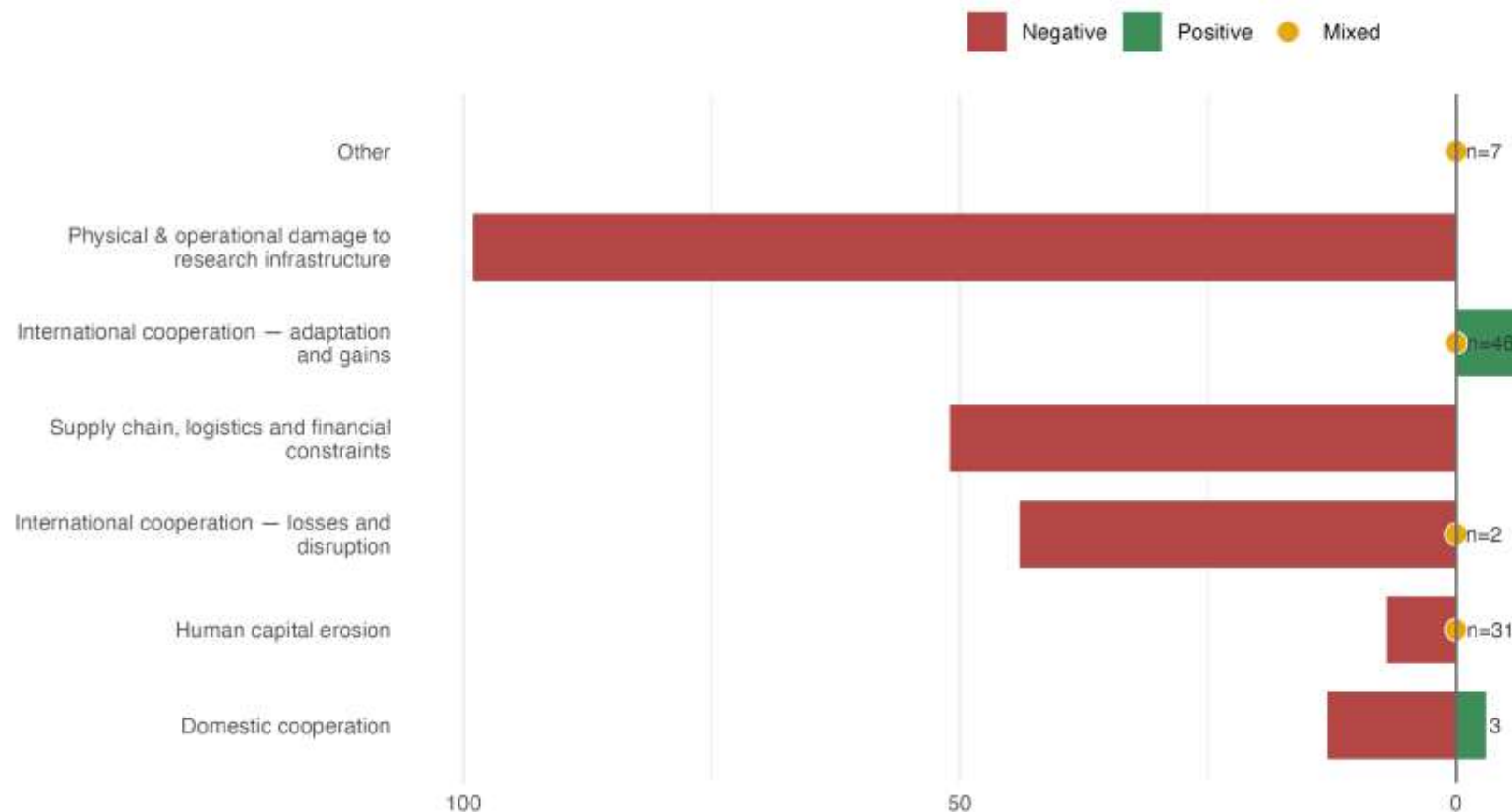


equipment **12.4 mln EUR**
laboratory building **2.5 bn EUR**

War damage – loss and gains

Primary negative impacts: Physical & operational damage to RIs

Losses and gains — categories



Significant constraints in logistics, financing and supply chains

Mixed responses regarding international cooperation

Lower, yet ongoing challenges in domestic cooperation and human capital loss

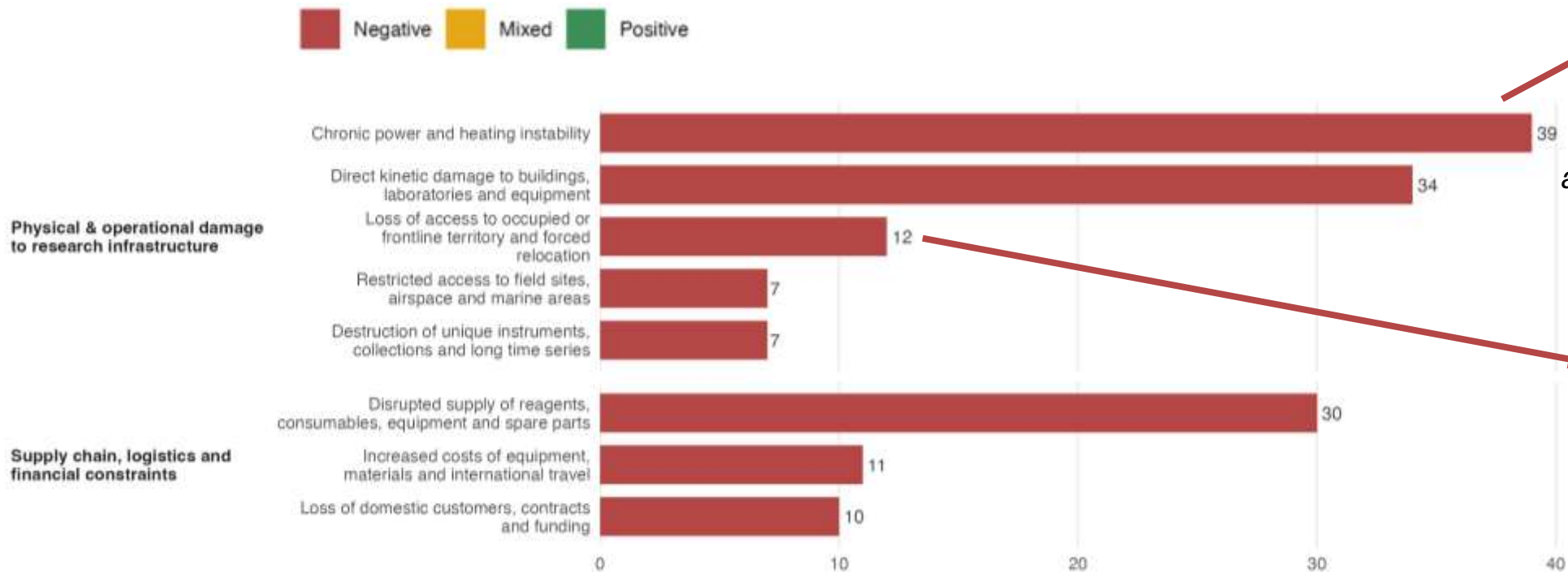
War damage – expansion on the loss and gains

Most frequently reported

- Physical & operational damage
- Supply chain & logistical problems
- Access & Displacement

Power and heating constitute the most prevalent issue, followed by direct damage to the buildings and interruptions to the supply chain essential for experiments.

A missile strike shattered nearly all windows in the institute buildings and destroyed part of the wet-chemistry glassware, temporarily halting analytical work.



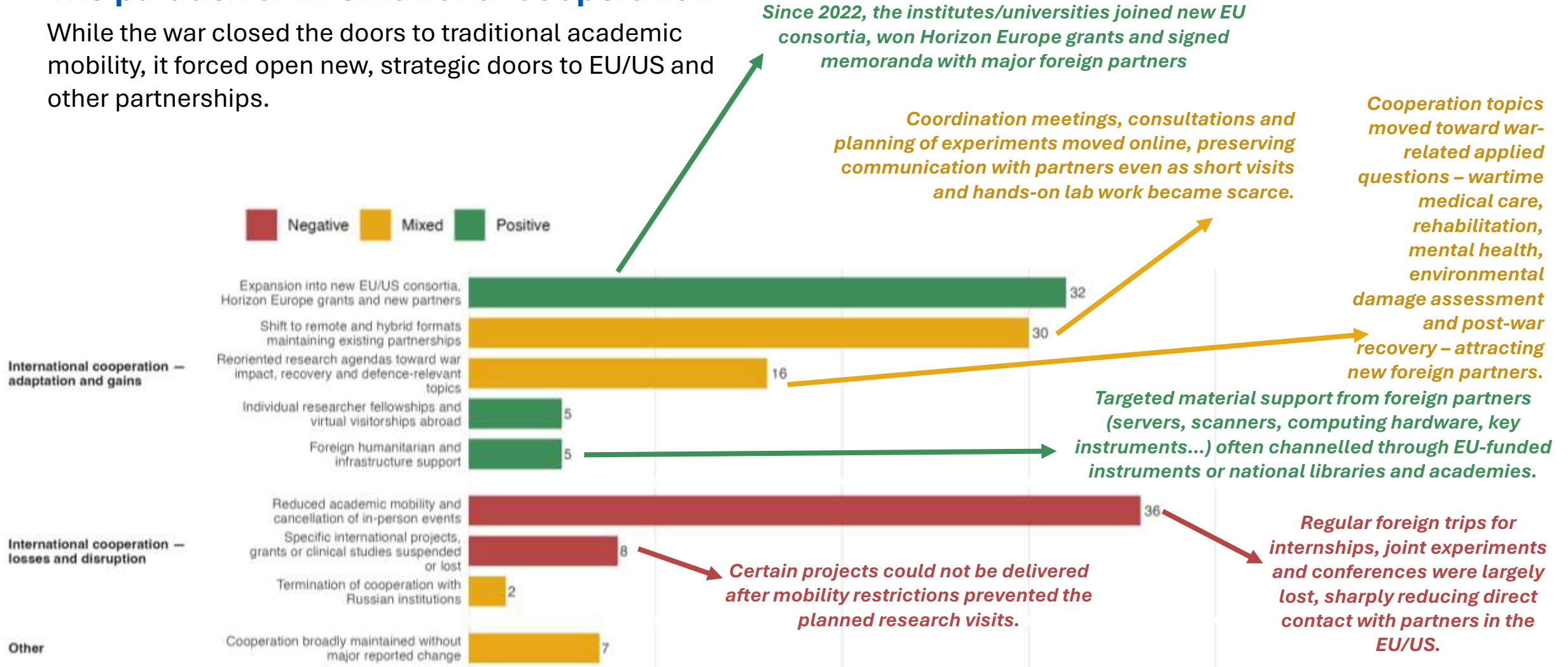
Displacement was not among the most frequently cited problems, yet it remains high on the list.

The university was relocated to another region in 2022 after losing access to its main campus, laboratories and experimental installations in the occupied territory.

War damage – expansion on the loss and gains

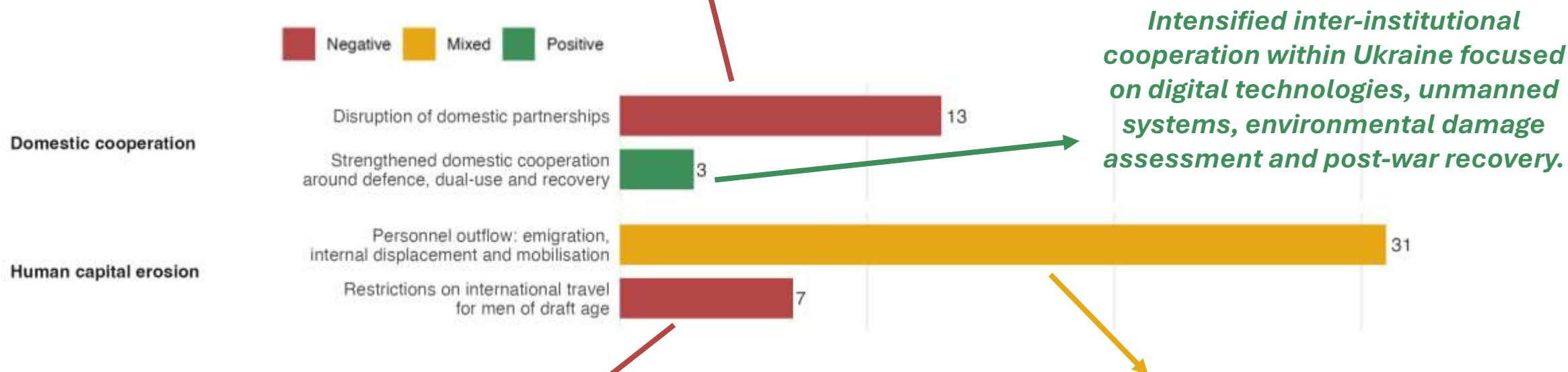
The paradox of international cooperation

While the war closed the doors to traditional academic mobility, it forced open new, strategic doors to EU/US and other partnerships.



War damage – expansion on the loss and gains

Cooperation with Ukrainian partner institutions slowed by their own damage or relocation, mobilised staff, uneven regional working conditions and reduced funding.



Intensified inter-institutional cooperation within Ukraine focused on digital technologies, unmanned systems, environmental damage assessment and post-war recovery.

Border-crossing restrictions on mobilisation-age male staff specifically identified as a barrier to conferences, internships and joint field work.

Loss or reduced availability of qualified staff owing to relocation abroad, internal displacement, mobilisation into the Armed Forces or reassignment to defence duties.

What happens in Ukraine

Ondřej Hradil

My trip to Ukraine – October 2025

- **Visited cities:** Lviv, Ivano-Frankivsk, Kyiv
- **Why to go there?**
 - Support our project partners
 - Experience first hand
 - Symbolise that we care



Attack on the building of the National Academy of Sciences of Ukraine, 28 September 2026



October 2025



28th September 2026

Russia Continues to Strike Ukrainian Science & Education



2 July 2026

Palladin Institute of Biochemistry

Heavy shelling caused fires, destroying key research facilities and equipment



20 September 2026

Sumy State University

Airstrike heavily damaged main academic building and surrounding campus structures.



21 September 2026

Zaporizhzhia National University

Drone strike set fire to historic building that is a cultural heritage landmark.



28 September 2026

Presidium of NAS Ukraine

Jet-powered drone set historic headquarters ablaze, causing casualties and severe destruction.

Ukrainian Government's Priority Action Plan for 2026-2027

- **Up to a 50% salary increase** for research staff based on the results of state certification;
- **2,650 state scholarships** for research and academic staff based on the results of ranking within the **National Researcher System of Ukraine**
- **Achieve at least 50% of the Roadmap** indicators for Ukraine's integration into the European Research Area (ERA)
- **Increase by 50% the number of Horizon Europe applications** submitted under open calls
- **Increase to 30%** the share of heads of research institutions **with approved key performance indicators (KPIs)**
- **Increase to 30%** the share of **core funding** for research institutions based on the results of state attestation
- **Increase to 15%** the share of **business** enterprise expenditure on research and development (R&D)
- **Double the number of publicly commissioned research projects** addressing national security and defence needs, Ukraine's recovery and the transformation of its economy

Reforms: From block funding to performance

2015

New science law

Creates the NRFU
1.7% of GDP target
competitive share to grow each year

2017

State attestation

Institutions ranked in groups A–D

(CMU Res. 540)

2020

First NRFU grants

216 projects funded through two calls

2022

Horizon Europe

Association in force 9 June, retroactive to 2021

2024

New methodology

37 indicators plus expert review of research impact

2025

Attestation round

500+ institutions, 2,000+ experts (~200 international); 75 failed (group D)

2026

Results-based money

€66 m by formula to 246 A/B institutions



Thank you!