



Horyzont 2020
CAMK, 31 stycznia 2014

Infrastruktura badawcza w Programie Horyzont 2020

Wiesław Studencki

**Krajowy Punkt Kontaktowy
Programów Badawczych UE**
w Instytucie Podstawowych Problemów Techniki
Polskiej Akademii Nauk

W niniejszej prezentacji wykorzystano materiały udostępnione m.in. przez KE i/lub Ministerstwa oraz Agendy RP





Definicja

„Infrastruktury badawcze” to urządzenia, zasoby i wirtualne platformy świadczące usługi dla społeczności naukowej, m.in.:

- laboratoria i obserwatoria
- kolekcje (np. biologiczne, historyczne)
- banki genów, tkanek itp.
- specjalistyczne zbiory w bibliotekach i archiwach
- statki, samoloty badawcze
- parki narodowe, rezerваты przyrody
- bazy danych
- infrastruktura informatyczna (e-infrastruktura)

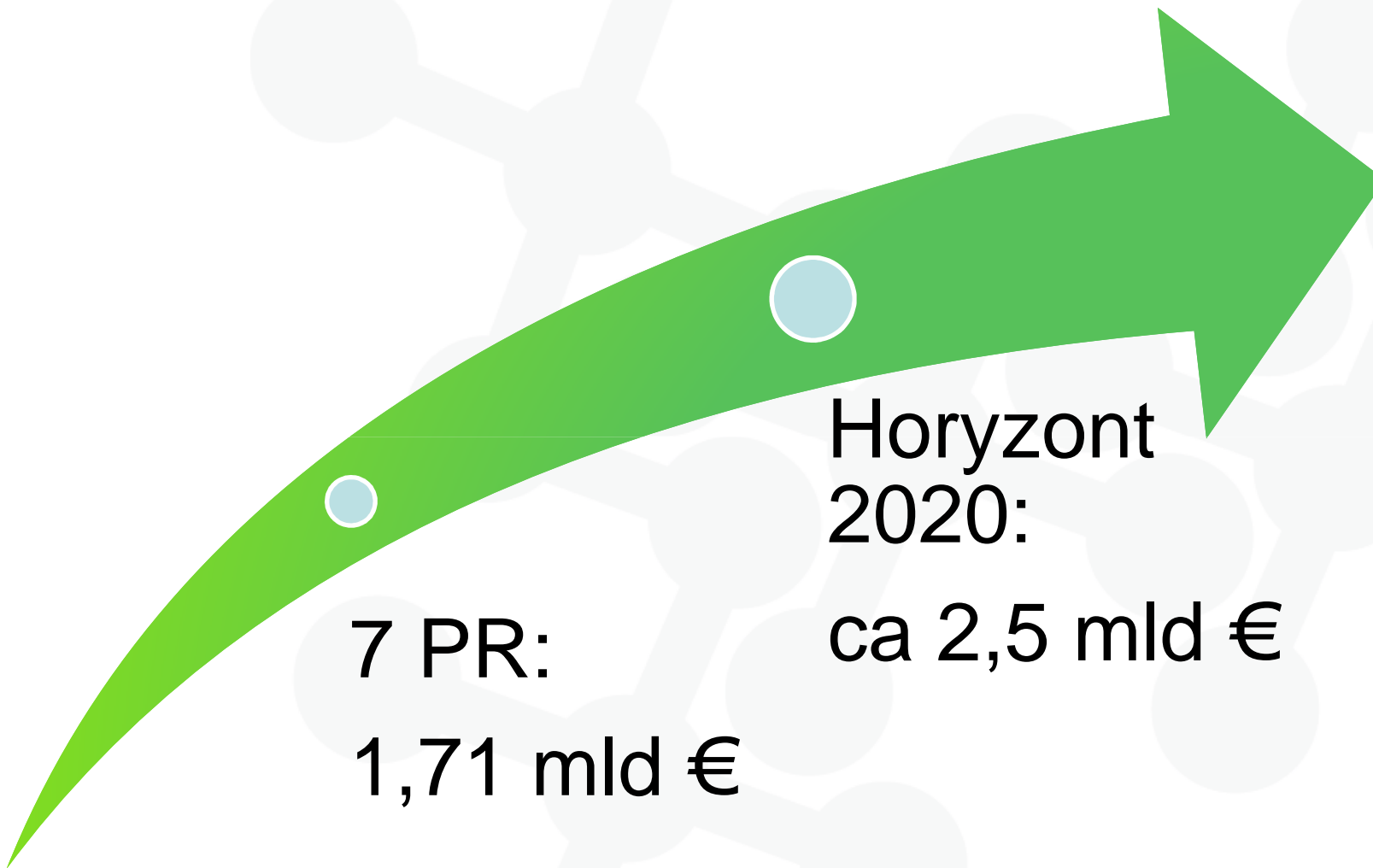


Excellent Science – funding (€ million, 2014-2020)

<i>European Research Council (ERC)</i> Frontier research by the best individual teams	13 095
<i>Future and Emerging Technologies</i> Collaborative research to open new fields of innovation	2 696
<i>Marie Skłodowska-Curie actions (MSCA)</i> Opportunities for training and career development	6 162
<i>Research infrastructures (including e-infrastructure)</i> Ensuring access to world-class facilities	2 488



Budżet dla infrastruktury badawczej





Projekty jak w 7PR

1. Projektowanie infrastruktury
2. Budowa nowych infrastruktury
3. **Działania integracyjne** – bezpłatny dostęp do infrastruktury
4. e-Infrastruktura – bezpłatny dostęp
5. Działania wspomagające





Projektowanie i budowa nowych infrastruktur

Prace projektowe.

Wspieranie studiów naukowej, finansowej i technicznej wykonalności nowych infrastruktur o europejskim znaczeniu.

Budowa wielkich infrastruktur o europejskim znaczeniu.

Większość kosztów budowy, działania i utrzymania infrastruktury musi być sfinansowana ze źródeł krajowych i międzynarodowych.

- **Tylko poprzez ESFRI** (*European Strategy Forum for Research Infrastructures*)
- **Tylko projekty z „mapy drogowej ESFRI”**

http://ec.europa.eu/research/infrastructures/index_en.cfm?pg=esfri-roadmap

Pożądana strategia:

→ dziś – udział

→ w przyszłości – dostęp





Budowa nowych infrastruktur - przykłady

FP7 - Preparatory Phase-ESFRI Roadmap Material, Analytical and Engineering Facilities

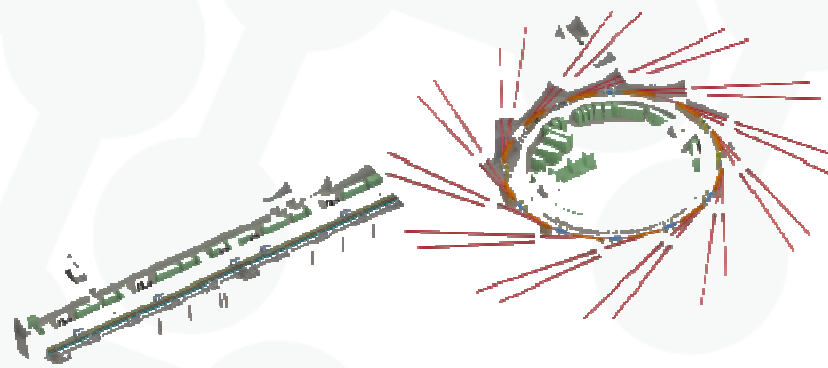
PP	EU support M€	Estimated total financial commitment
EMFL	4	115 million
ESRF Upgrade	5	241 million
EuroFEL	5,7	1.6 billion
ESS	5	1.5 billion
European XFEL	5	1.1 billion
ILL20/20Upgrade	4,7	171 million
ELI PP	6	845 million





ESFRI a polskie inwestycje

- Polska mapa drogowa – 33 projekty, z których 18 ma związek z projektami z mapy drogowej ESFRI
- Aktualizacja w 2013, na lata 2014-2020
- Miejsce na mapie drogowej → większa szansa na sfinansowanie z budżetu krajowego lub funduszy strukturalnych





Działania integracyjne

3 obowiązkowe elementy projektu:





- **Współpraca w sieci (Networking):** koordynacja, komplementarność, wspólne zasoby
- **Ponadnarodowy dostęp do infrastruktur (Transnational access)**
- **Działania badawcze (Joint Research Activities):** np. budowa aparatury nowej generacji, testowanie nowych technik i metod





Działania integracyjne (2)

Bezpłatny **dostęp do infrastruktur** – zasady:

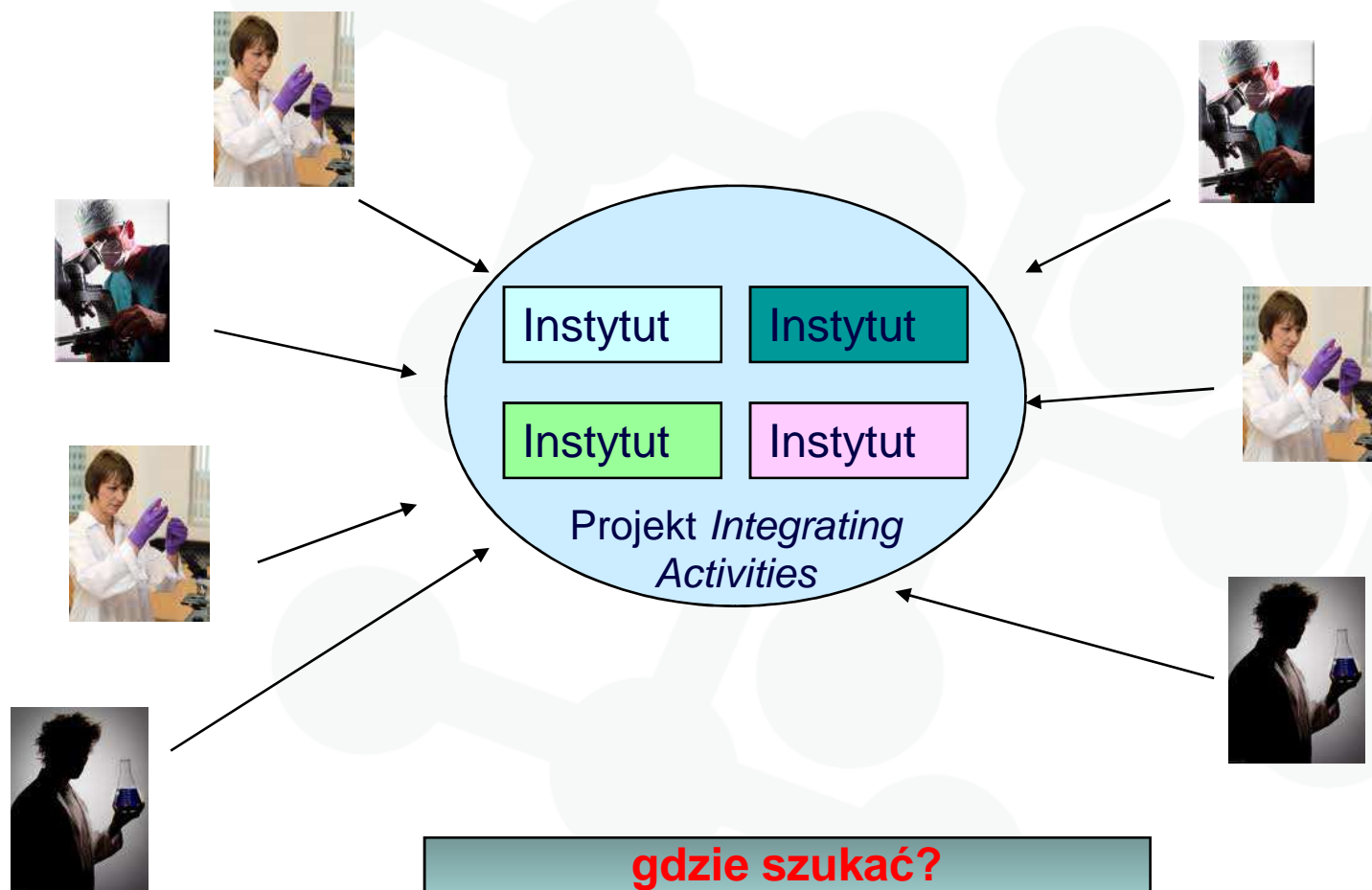
- konieczność wyjazdu do innego kraju (*Transnational Access*)
- długość pobytu – od 1 tygodnia do 3 miesięcy
- projekt pokrywa koszty:
 - ✓ badań 
 - ✓ podróży 
 - ✓ pobytu 
 - ✓ dostępu do e-infrastruktury 





Dostęp do infrastruktury czyli *Transnational Access*

Bezpłatne prowadzenie badań w najlepszych ośrodkach



gdzie szukać?

<http://www.euroris-net.eu/>





<http://www.euroris-net.eu/> Transnational Access open calls in one database



European Network of National Contact Points
for Research Infrastructures moving forward

Home About EuroRIS-Net+ News RI Calls Information E-Newsletter Success Stories Events Related projects & links

Network Area

Login Area

RI Knowledge Repository

Stakeholders' Forum

Transnational Access Opportunities

RI Policy News

FP7 NCP networks' corner

Welcome to EuroRIS-Net+

EuroRIS-Net+ builds on the Network of National Contact Points for the Research Infrastructures programme (RIs NCPs) to provide value-added services, which will facilitate transnational cooperation of NCPs, promoting the effective implementation of the RI programme, highlighting opportunities offered by Research infrastructures - at the European and international level - and their impact on e-science.

The Network develops **observatory** functions for EC and national Research Infrastructures policies, programmes and initiatives, supporting an efficient dialogue scheme for RI NCPs with the RI ecosystem and a sustainable and comprehensive RI Knowledge Management Strategy.

You can find more information on EuroRIS-Net+ new services through the twin leaflets of the project.



One-stop shop

RI Events Calendar

« Prev April 2012 Next »

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28



RI Observatory

Transnational Access Opportunities

RI Policy

FP7 IICP networks' corner

FAQs

RI Events Calendar

« Prev November 2013 Next »

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Follow us on Twitter

Home » RI Calls Information

Transnational Access Open Calls



Through this section, RI projects offering transnational access opportunities are presented (both I3 projects and e-infrastructure). Through our project team all data will be revised and updated at a regular basis, aiming to offer the most up-to-date information on the opportunities offered through the existing infrastructures of pan-European interest. This section will include open calls issued by I3 projects (existing infrastructures) for transnational access opportunities, based on the communication of our network with the I3 projects and constant updates of the relevant information.

There are 30 open calls right now.

Project Acronym	Transnational Access Info & Title	Current Call Open date	Domain
<input type="text"/>	<input type="text"/>	Is equal to	- Any -
Free Text Search		-Year	-Month
			Remote access
			<input type="radio"/> - Any -
			<input checked="" type="radio"/> No
			<input type="radio"/> Yes
<input type="button" value="APPLY"/>			

Project: diXa |

Data Infrastructure for Chemical Safety

Transnational Access opportunities:

The main objective of the "Data Infrastructure for Chemical Safety" (diXa) project is to further develop and adopt a robust and sustainable service infrastructure (e.g. data infrastructure and e-science environment) for harboring multiplexed data sets as produced by past, current and future EU research projects on developing non-animal tests for predicting chemical safety, in linkage with other globally available chemical/toxicological data bases and data bases on molecular data of human disease.

Project: NMDB |

Transnational Access is an open call within EUROCHAMP-2. Please submit your proposal [here](#).

Transnational Access (TA)

Within the EUROCHAMP-2 project we now offer transnational access to **15 chambers** at 13 different locations. This activity promotes scientific excellence through the mobility of experts and access of research scientists, in particular new users, to the high quality EUROCHAMP-2 infrastructure. Such users may be engineers or scientists who need support from the infrastructure to conduct research in various fields of atmospheric environmental chemistry. Access to the installations is offered free of charge and the cost of the chamber operation is covered through a **TA proposal** which was successfully reviewed by the **user selection panel (USP)**. A list of **successful TA proposals** provides an overview on the research fields and various groups using TA.

The call for the EUROCHAMP-2 TA activities is a continuous call; proposals are accepted at any time from any researcher or research team. **However, we expect the proposal at least one month in advance of the earliest start of the TA activity.** The proposals are subject to the **Transnational Access Evaluation Procedure** briefly outlined here:

1. An incoming proposal is verified by the EUROCHAMP-2 office for **formal compliance** with the EU regulations.
2. The proposal is examined by the corresponding access provider of the infrastructure for the **scientific quality** of the proposal and the **feasibility** for the use of the facility.
3. The proposal is forwarded to the **USP**, consisting of members from the EUROCHAMP International Advisory Committee (IAC) and from the Eurochamp consortium. The USP will judge the scientific content of the project and rank the proposals according to defined **selection criteria**.
4. The **final decision** is forwarded to the applicant by the EUROCHAMP-2 office.

The user selection panel will review the proposals with respect to the following criteria:

- Originality and scientific value of the proposal
- Interest to the scientific community
- Involvement of new users
- Training benefit to young researchers
- mobility of experts

Please download the **Transnational Access Evaluation Procedure**, **Transnational Access Proposal Guideline** and the **Transnational Access Proposal Form**. Please fill the form and submit through **upload web interface**. The proposal will be forwarded to the TA coordinator and the host. You will receive a Eurochamp TA reference number which we would like you to use for the correspondence, e.g. **update** of your existing proposal.

Each Group Leader of a user-project supported under an EC Research Infrastructure grant agreement is requested to complete the present **User Group Questionnaire**. The questionnaire must be submitted once by each user group on 2025-02-28.



e-infrastruktury

Dostęp do najlepszych sieci i zasobów

- sieć GEANT
- sieci gridowe
- cyfrowe repozytoria naukowe
- infrastruktura danych naukowych





The EarthServer Initiative

EarthServer is establishing open access and ad-hoc analytics on extreme-size Earth Science data, based on and extending leading-edge [Array Database](#) technology.

Database query languages serve as client/server interface for "mix & match" access to multi-source, any-size, multi-dimensional spatio-temporal data - in short: "Big Earth Data Analytics" - based on the open standards of [OGC](#) and [W3C](#). The platform technology, [rasdaman](#), gets extended with further spatiotemporal [coverage](#) data types. Highly effective optimizations - such as parallel and distributed query processing - ensure scalability to Exabyte volumes.

Six [Lighthouse Applications](#) with 100+ TB will demonstrate feasibility of this approach. Experience is being fed back into standardization to advance OGC specifications.

Hits since 2013



News

2013-Nov-15: EarthServer Climate Data Service integrated at the European Space Agency [more](#)

2013-Oct-01: EarthServer activities presented at the FOSS4G 2013 [more](#)

2013-Oct-01: EarthServer activities on standardization presented at the OGC TC Meeting [more](#)

2013-Sep-26: EarthServer 3D client presented on the

Social media

[Follow @EarthServer_EU](#)

[Join the EarthServer User Interest Group](#)



Cryospheric Science
landcover mapping

EOX

Airborne Science
high-altitude long-endurance drones

NASA

Atmospheric Science
climate variables

MEEO

Geology
geological models

British Geological Survey

Oceanography
marine model runs + in-situ data

PML PLYMOUTH MARINE LABORATORY

Planetary Science
Mars geology

JACOBS UNIVERSITY

Project Brief

Title: EarthServer

Run time: Sep 2011 - Aug 2014

Budget: 5.85 mEUR

EU Contribution: 4.00 mEUR

Funded by: EU e-Infrastructure

Project Number: 283610





Najbliższe konkursy (1)

1. Projektowanie infrastruktury

- INFRADEV-1-2014: Design Studies **2.09.2014, 17.00**

2. Budowa nowych infrastruktury

- INFRADEV-2-2015: Preparatory Phase of ESFRI projects 14.01.2015, 17.00
- INFRADEV-3-2015: Individual implementation and operation of ESFRI projects 14.01.2015, 17.00
- INFRADEV-4-2014/2015: Implementation and operation of cross-cutting services and solutions for clusters of ESFRI and other relevant research infrastructure initiatives **2.09.2014, 17.00**





Najbliższe konkursy (2)

3. Działania integracyjne

- INFRAIA-1-2014/2015: Integrating and opening existing national and regional research infrastructures of European interest

2.09.2014, 17.00

4. e-Infrastruktura

- EINFRA-2-2014 – e-Infrastructure for Open Access
- EINFRA-1-2014 – Managing, preserving and computing with big research data
- EINFRA-3-2014 – Towards global data e-infrastructures – Research Data Alliance
- EINFRA-4-2014 – Pan-European High Performance Computing infrastructure and services
- EINFRA-6-2014 – Network of HPC Competence Centres for SMEs
- EINFRA-7-2014 – Provision of core services across e-infrastructures
- EINFRA-8-2014 – Research and Education Networking – GÉANT
- EINFRA-5-2015 – Centres of Excellence for computing applications
- EINFRA-9-2015 – e-Infrastructures for virtual research environments (VRE)

15.04.2014, 17.00

2.09.2014, 17.00

14.01.2015, 17.00





Działania integracyjne - tematy

- **Physical Sciences – Starting communities**
 - European laboratory astrophysics
 - Research infrastructures for high-energy astrophysics
 - Science at deep-underground laboratories
 - Integrating gravitational wave research
- **Physical Sciences – Advanced communities**
 - Detectors for future accelerators
 - Research infrastructures for nuclear physics
 - European planetary science

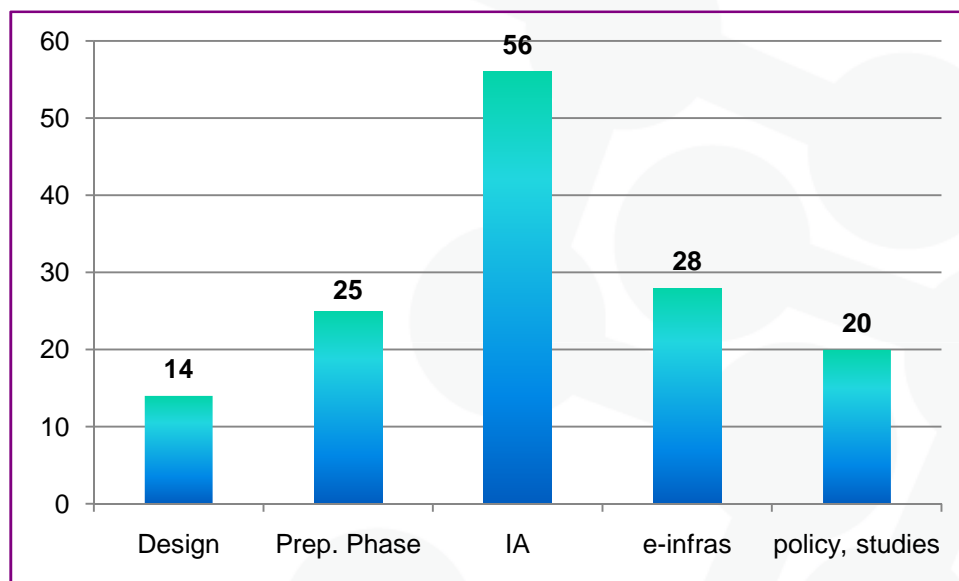
One proposal per area is expected to be funded





7PR: polskie sukcesy

➤ 147 udziałów w projektach



➤ koordynacja projektu DORII





Dziękuję za uwagę

Pytania?

Osoby do kontaktu:

Wiesław Studencki

e-mail: Wieslaw.Studencki@kpk.gov.pl

Krajowy Punkt Kontaktowy Programów Badawczych UE

Instytut Podstawowych Problemów Techniki
Polskiej Akademii Nauk

ul. Krzywickiego 34
02-078 Warszawa

tel: **0 22 828 74 83**

fax: **0 22 828 53 70**

e-mail: **kpk@kpk.gov.pl**

