

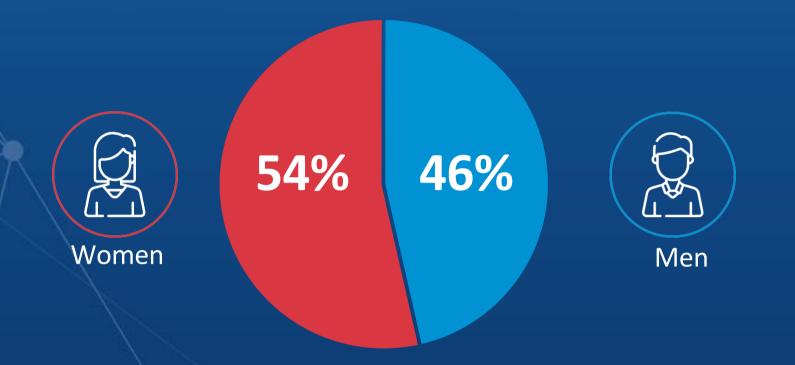
### Republic of Serbia

### MINISTRY OF SCIENCE, TECHNOLOGICAL DEVELOPMENT AND INNOVATION

Vukašin Grozdić State secretary



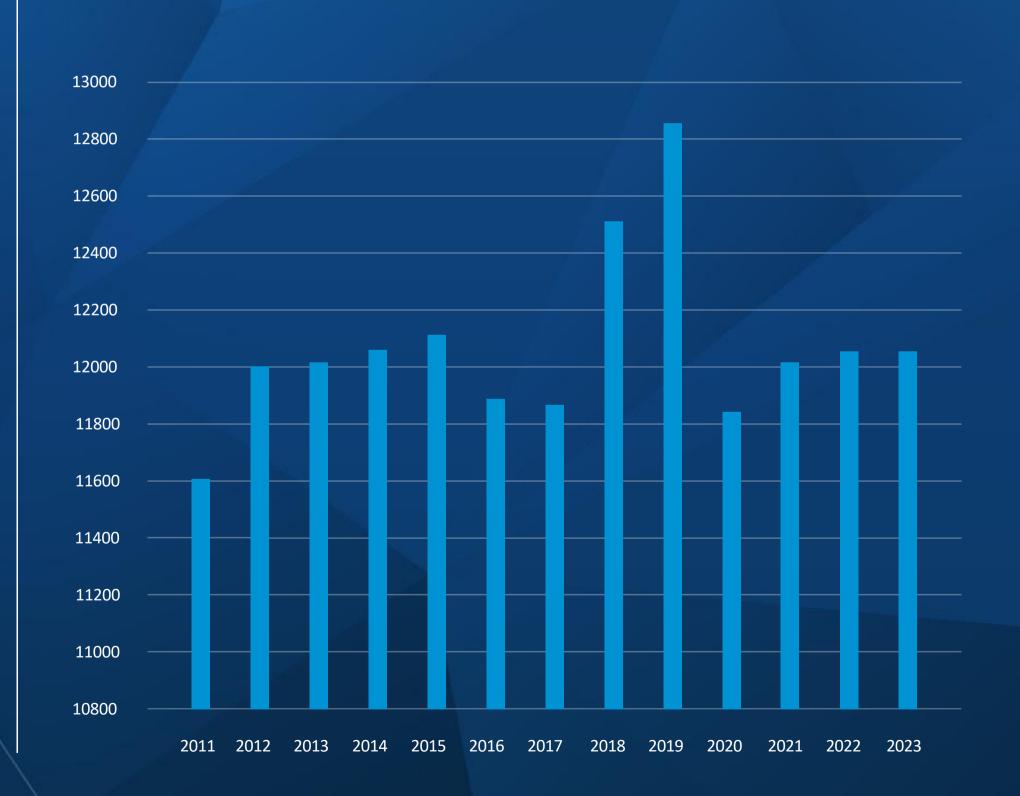
## Researcher Gender Structure, Nitra Source



#### RESEARCH STRUCTURE BY SCIENTIFIC FIELDS AND GENDER

	Total Number	Male %	Women %				
Scientific Field	19514	47.1	52.9				
Natural Sciences	4129	43.4	56.6				
Engineering and Technology	4202	57.6	42.4				
Medical Sciences	2736	40.2	59.8				
Agricultural Sciences	1231	47.1	52.9				
Social Sciences	2718	47	53				
Humanities	1646	41.3	58.7				
RESEARCH STRUCTURE BY SECTORS AND GENDER, RZS							
Business Sector	1563	64.6	35.4				
Government Sector	3401	37.9	62.1				
Higher Education Sector	11695	47.5	52.5				

## NUMBER OF RESEARCHERS IN THE MINISTRY FUNDING SYSTEM



## Top performing talent pool in Serbia – University education



**Universities:** 

**Research Institutes** 



118 faculties



79 institutes

Strong background:



Engineering III A Physics A Mathematics





Serbia is ranked as 9th in respect to Graduates in Science and Engineering according to Global Innovation Index 2023

(The share of all tertiary graduates in science, manufacturing, engineering and construction over all tertiary graduates)

401-500\*

Shanghai Ranking

Top 300\*

In Physics and Mathematics

University ecosystem breakdown by majors:



27% Social Sciences, Business and Law

16% Mathematics, **I**& Computing Engineering & Manufacturing

37%

>50% (approx. 130 K) **STEM students** 





MORE THAN 600 STARTUPS



NEARLY 100 BLOCKCHAIN-BASED STARTUPS



40 000 DEVELOPERS



VIDEO GAMES CREATED IN SERBIA ARE PLAYED BY MORE THAN 370 MILLION PEOPLE WORLDWIDE



4 SCIENCE AND TECHNOLOGY PARKS, IN BELGRADE, ČAČAK, NIŠ AND NOVI SAD



FROM € 740 MILLION TO € 3.5 BILLION THE LARGEST EXPORTING INDUSTRY OF SERBIA

## SCIENCE TECHNOLOGY PARKS













311
COMPANIES



183

STARTUPS



2,377

INNOVATIONS



41
DIGITAL
MEMBERSHIP

COMPANIES



2,982
EMPLOYEES



87
IT COMPANIES

### Brief overview of Al roadmap of Serbia





**The Government** establishes the Institute for AI

a Center of Excellence, 1st such Institute Southeast Europe

Serbia's Al Platform in Top 10 Best Public **Sector Innovation Projects by OECD** 

Expected >500 students enrolled into Al master programs.

2025

2023

at 6 faculties, 4 Universities

Adopted ethical guidelines for Al

Serbia becomes member of Al

Introduced tax incentives for R&D

2020

Opened 3 new Science Technology Parks – Niš, Čačak, **Novi Sad** 

1<sup>st</sup> to adopt the

National Al Strategy

in Southeast Europe

2019

**Elementary schools** 

2021

7th & 8th grade Al subjects

High Schools have an Al elective subject

Coding as mandatory subject in elementary schools

2017

2018

The Centre of Digital **Transformation** a coordination & implementation body Serbia becomes part GPAI





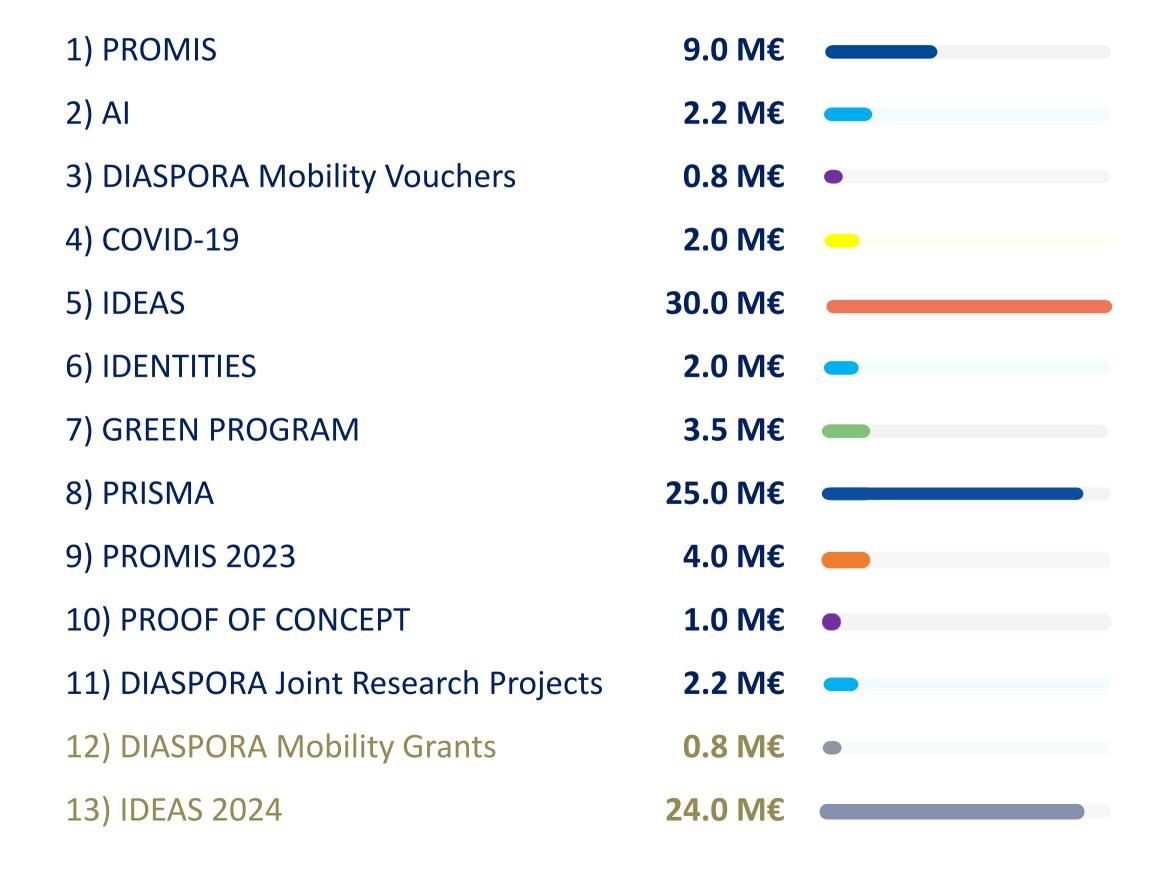
Introduced 7 new master programs in Al

2022

Governance **Alliance** 

#### **National Science fund**

SFRS programs are designed to meet the needs of the scientific community in the Republic of Serbia and challenges of society in general.



## 81,7 M€

## Total budget for 11 programs

Programs are funded by:







# MULTILATERAL PROGRAMS

• EU Framework Programs for Research and Innovation Over the past four years, the HEU funding amounted to €19,519,795.75 in 2021, €21,829,023.94 in 2022, €42,082,354.85 in 2023, and €33,213,293.48 in 2024, totalling €83,431,174.54.

- EUREKA program
- COST program European Cooperation in Science and Technology









#### Republic of Serbia

MINISTRY OF SCIENCE, TECHNOLOGICAL DEVELOPMENT AND INNOVATION

## WE SUPPORT INNOVATORS, RESEARCHERS, AND ENTREPRENEURS













REPUBLIC OF SERBIA
INNOVATION
FUND

Innovation Acceleration and Entrepreneurship Growth Project in the Republic of Serbia



## SERBIA ACCELERATING INNOVATION AND GROWTH ENTREPRENEURSHIP PROJECT – SAIGE

The Republic of Serbia's **joint investment** (MSTDI) through a World Bank loan and technical support amounting to **43 million euros** and non-repayable financial support from the EU through IPA amounting **to 41.5 million euros**.

#### **COMPONENT 1**

Reform of the scientific research sector (SFRS and MSTDI)

- Science Fund of the Republic of Serbia 22.5 million euros + DF 16.5 million euros
- Reform of Research Organizations 8 million euros + DF 5.7 million euros
- Cooperation with the Serbian scientific diaspora 3.5 million euros

#### **COMPONENT 2**

Enterprise acceleration (IF) - 7 million euros + DF 4.7 million euros

#### **COMPONENT 3**

**Implementation** of the project, monitoring, capacity building (MSTDI) - 2 million euros













## Funding in total—statistics

	2019	2020	2021	2022	2023
Indicator	2015	2020	2021	2022	2023
Total RD resources/GDP [%]	0.89	0.91	0.99	0.97	0.95
Budget RD resources/GDP [%]	0.4	0.46	0.42	0.39	0.39

Ministry budget in (RSD)	Annual incresement
19,822,863,227	
21,023,064,609	6%
24,912,174,712	18%
27,002,817,026	8%
33,991,384,071	26%
37,552,617,000	10%
	19,822,863,227 21,023,064,609 24,912,174,712 27,002,817,026 33,991,384,071

# Serbia's financial contributions for research at CERN between 2019 and 2024 [in CHF]

2019	2020	2021	2022	2023	2024	<u>2019 - 2024</u>	Type of contribution
3.034.800	2.808.900	2.865.800	3.002.950	3.211.200	3.444.800	18.368.450	General contribution
		1.643.850	505.800	505.800	4.352	2.659.802	Special Contributions
				64.400	64.400	128.800	Contribution for the increase of electricity price
166.346	148.470	120.835	142.018	238.230	205.890	1.021.789	Participation of our researchers in different experiments (collaborations)
						22.178.841	TOTAL



## Researchers from Serbia participate at the experiments:

> CMS



> ATLAS



> ISOLDE



> SHINE



> GRID





## MoU with CERN: Worldwide LHC Computing Grid

- Memorandum of Understanding signed on December 9, 2023, between CERN, NITRA, and MIT
- for the establishment of a "Tier-1 center" at the State Data Center in Kragujevac.
- -The center is part of the Nordic Data Grid Facility and supports the CMS experiment.
- Part of the global computing infrastructure (WLCG) to store, process, transfer, and analyze LHC data.





By establishing a "Tier-1 center" at the State Data Center in Kragujevac, Serbia becomes one of 7
European countries and 10 worldwide (alongside the USA, Canada, South Korea)