Cofinanțat de
Uniunea Europeană

Romanian Artificial Intelligence Hub
code SMIS: 351416

Romanian Artificial Intelligence HUB - Overview

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SMART DIASPORA
November 5th, 2025

HUB ROMÂN DE INTELIGENȚĂ ARTIFICIALĂ

Romanian Artificial Intelligence HUB

The Smart Growth, Digitalization and Financial Instruments Programe 2021–2027 (PoCIDIF)

Priority 4 – Development of strategic technologies for Europe

Call PoCIDIF/709/PoCIDIF_P4/OP1/RSO1.6/PCIDIF_A12

Action 4.1 – Support for the development of strategic technologies for Europe – STEP, Code SMIS 2021- 351416**.**

Duration: 2025–2029

Consortium

HUB ROMÂN DE INTELIGENȚĂ ARTIFICIALĂ

LEAD Universitatea Națională de Știință și Tehnologie POLITEHNICA București

P1 Universitatea Tehnică din Cluj-Napoca

P2 Universitatea de Vest din Timișoara

P3 Universitatea Tehnică „Gheorghe Asachi" din Iași

P4 Universitatea Politehnica din Timișoara

P5 Universitatea din București

P6 Universitatea „Babeș-Bolyai" din Cluj-Napoca

P7 Beia Consult International SRL

P8 Centrul IT pentru Știință și Tehnologie SRL

P9 GreenSoft SRL

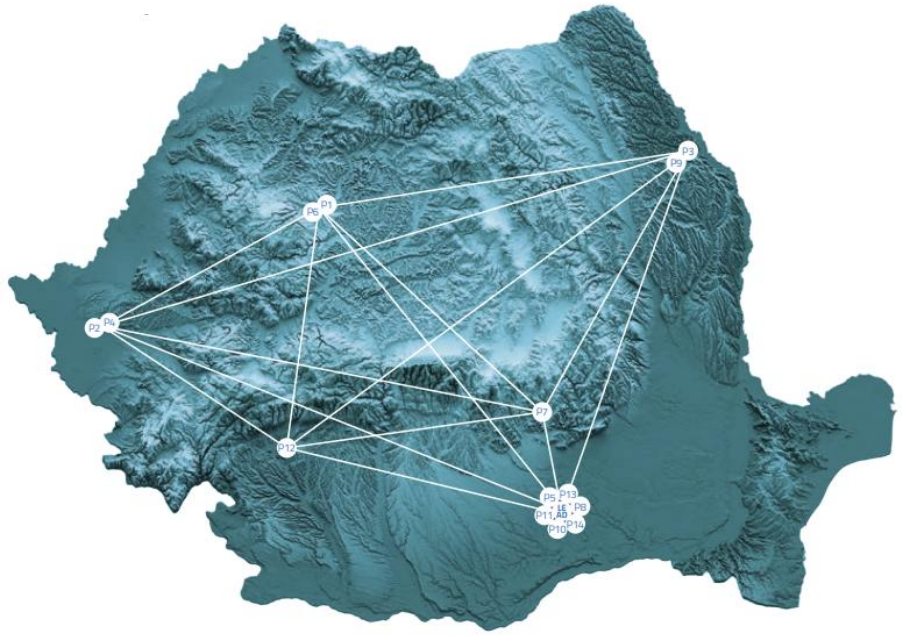
P10 Neural Grader SRL

P11 Safetech Innovations SA

P12 SoftTehnica SRL

P13 Technology Systems and Services International SRL

P14 Terrasigna SRL

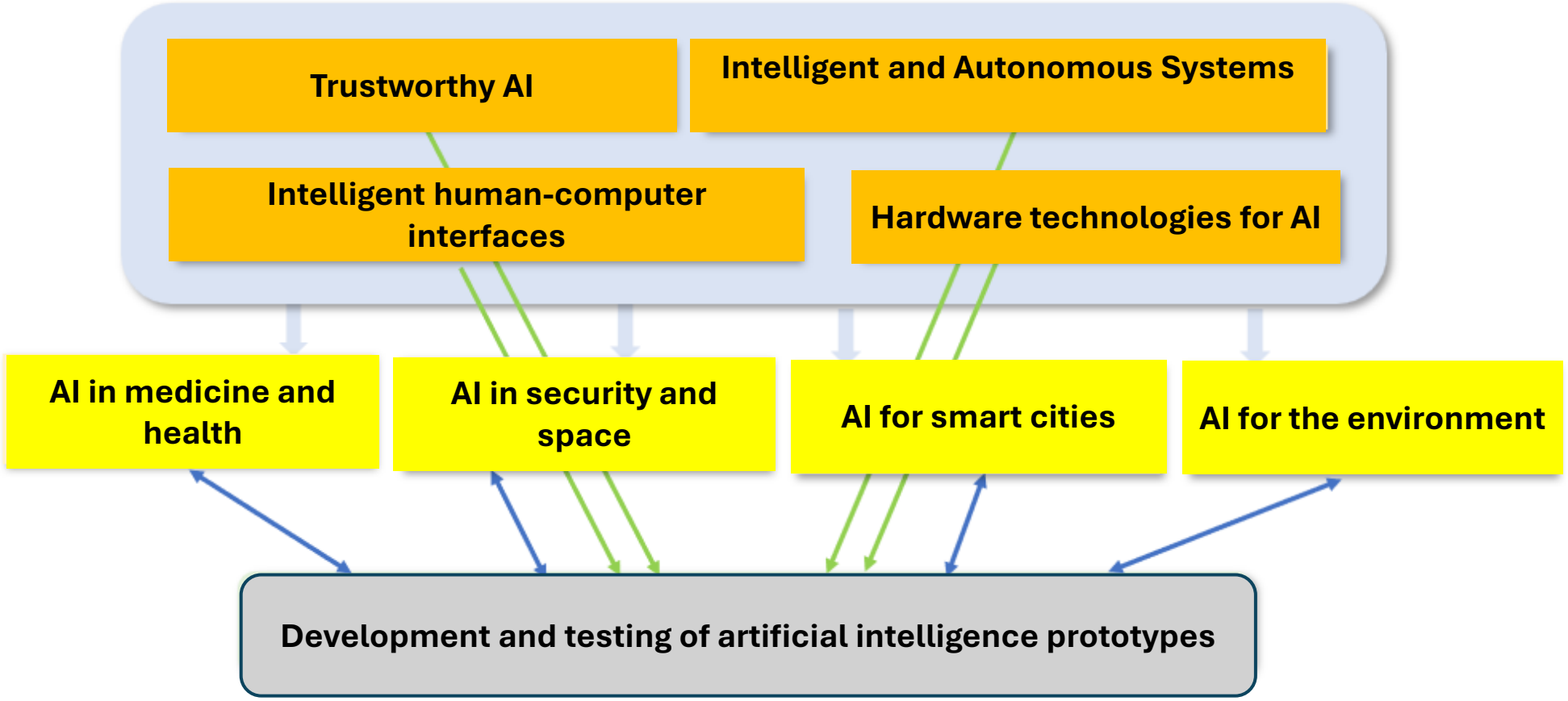


The general objective of HRIA

The establishment and operationalization of the **Romanian Artificial Intelligence Hub** aims to advance research, development, and innovation in Artificial Intelligence by **creating an attractive and competitive research ecosystem**. This initiative unites the efforts of academia and industry to:

- foster **cutting-edge scientific research**,
- facilitate the **transfer of research results to industry** and society,
- support the creation of **new products and services**, and
- develop a **knowledge and innovation nucleus** in Artificial Intelligence, fully integrated into the European Research Area.

Research Directions Laboratories



Specific objectives

O1. The advancement of the AI domain in Romania through the conduct and promotion of excellence-driven research, applied research, innovation, and interdisciplinary scientific activities, all aligned with the highest international standards.

Result of achieving the objective:

R1 - New AI technologies, models, methods, and algorithms,
prototypes of AI-based systems and services, original and innovative, in the RDI directions from T1 to T8.

O2. Collaboration with the business environment, transfer of AI results to the economic sector, and large-scale introduction of AI into the Romanian economy.

Result of achieving the objective:

R2 *– Increasing the innovation capacity of Romanian companies by introducing AI into product and process innovation, and developing pilot projects and AI-based applications.*

Specific objectives

O3. The development of highly specialized human resources by attracting, training, and retaining new generations of AI researchers and leading experts from Romania and abroad, including the scientific diaspora, to ensure their long-term integration into the national research ecosystem.

Result of achieving the objective:

***R3** – Highly specialized researchers in Artificial Intelligence.*

Specific objectives

O4. Development of a research infrastructure at international standards and its efficient use to support the research, development, and innovation objectives of HRIA.

Result of achieving the objective: ***R4*** *– High-performance computing infrastructure.*

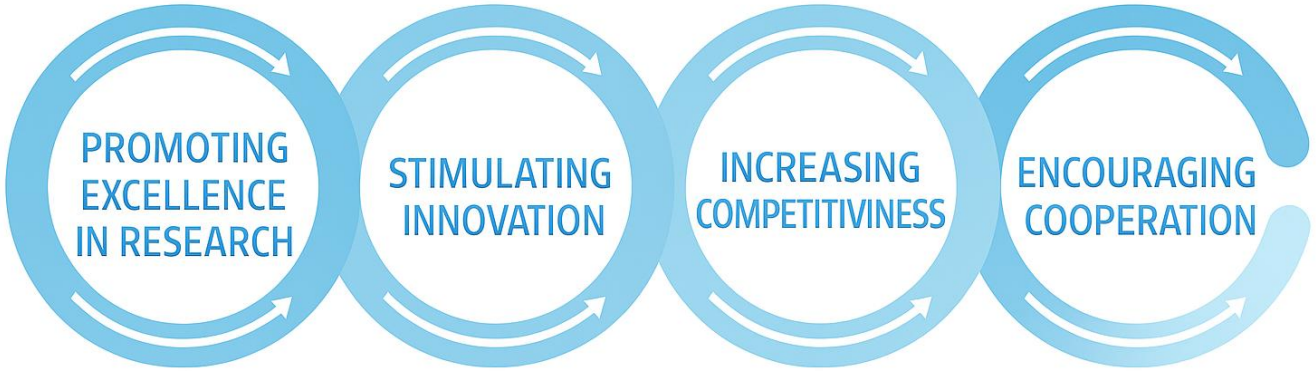
O5. Enhancing the international visibility of Romanian research in AI and strengthening the capacity of Romanian researchers to engage in European collaborations and participate in the European Union's excellence research networks.

Result of achieving the objective:

R5 *– The visibility of Romanian researchers at the European and international level, Romania's participation in Horizon Europe and other international projects, and integration into the European Research Area.*

Methodology

The methodology of the HRIA project is structured around **four interrelated pillars**, integrated into continuous feedback loops: **promoting research excellence, stimulating innovation and technology transfer, increasing economic competitiveness, and encouraging cooperation**.





Activities

A1. Development of technologies, systems, and services based on the latest artificial intelligence techniques to solve complex real-world problems through highly original and innovative solutions, for various application domains, addressing the needs of industry and society in continuous transformation. **M1–M58**

A1.1 Applied, industrial, and innovation research, including collaboration with SMEs. **M1–M58**
A1.2 Exchange of experience, interregional collaborations and networking, participation in conferences, and publication of scientific papers. **M2–M58**

A2. Technology transfer and collaboration with SMEs to develop innovative, high–value-added AI-based products and services, aimed at addressing technological and market challenges. **M1–M58**

A2.1 Development of pilot projects and AI-based applications, including system testing.**M6-M58**
A2.2 Technological and knowledge transfer and experimental development activities, including collaboration with SMEs. **M6–M58**
A2.3 Industrial research and experimental development carried out by companies in collaboration with universities, product innovation, and initial investments for production implementation. **M1–M58**

A3. Obtaining, validating, and protecting invention **patents**. **M10–M58**

A4. Dissemination, promotion, communication, information, and publicity activities regarding the project. **M1–M58**
A4.1 Dissemination and promotion of project results through dissemination events, workshops, thematic sessions, and working meetings. **M1–M58**
A4.2 Information and publicity materials. **M1–M58**

A5. Project **management**. **M1–M58**

Indicators

Achievement

- **RCO 01** – Enterprises benefiting from support: **8**
- **RCO 02** – Enterprises benefiting from grant support: **8**
- **RCO 07** – Research organizations participating in joint research projects: **7**
- **RCO 06** – Researchers working in research centers benefiting from support (ENI): **70.4**
- **RCO 08** – Nominal value of equipment for research and innovation: **€11,302,738.8**
- **RCO 10** – Enterprises cooperating with research organizations: **8**

Results

- **RCR 03** – Small and medium-sized enterprises (SMEs) introducing product or process innovations: **7**
- **RCR 06** – Patent applications submitted: **34**
- **RCR 08** – Publications benefiting from project support: **361**
- **RCR 102** – Jobs created in research within entities benefiting from support (ENI): **38.28**

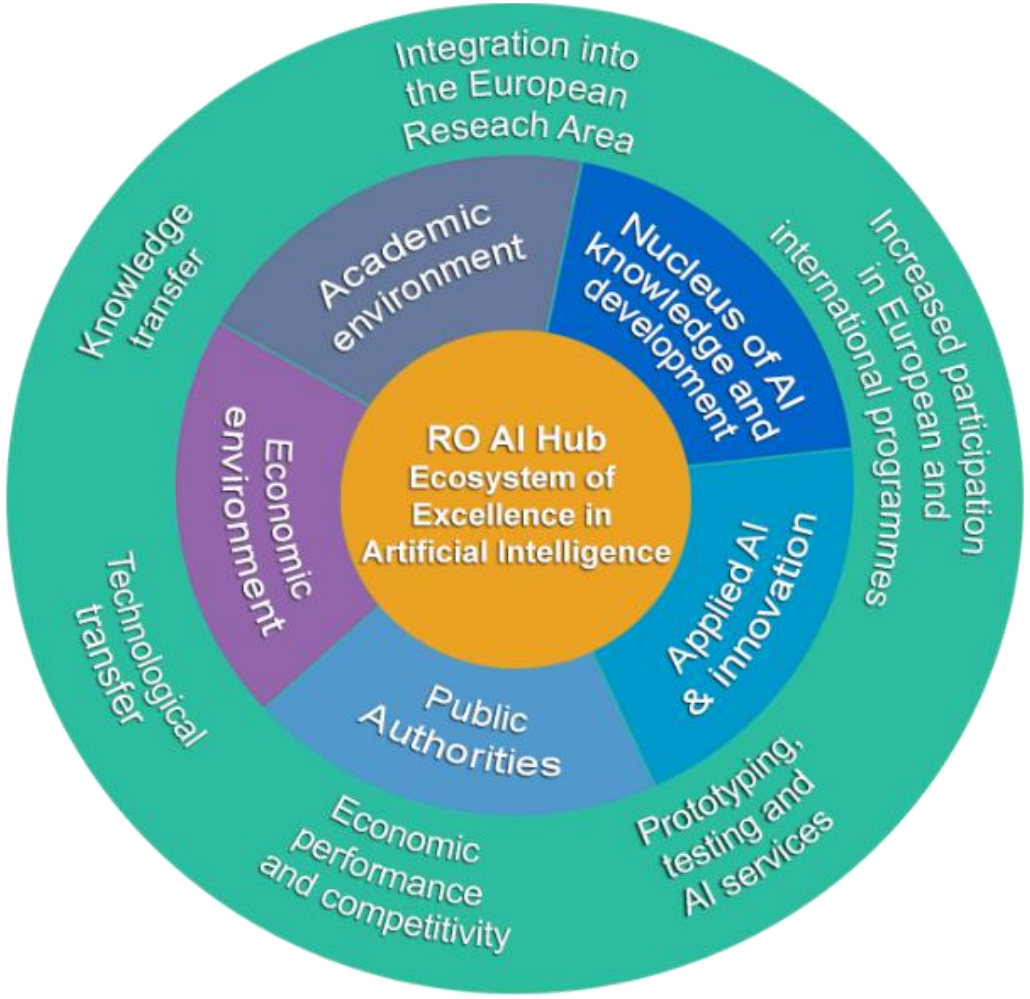
Indicators

Additional

- Number of technologies, demonstrators, and scientific-technical reports developed by partners: **70**
- Number of prototypes, pilot projects, services, and applications developed by partners: **21**
- Number of international institutional cooperation agreements: **18**
- Number of project proposals submitted under Horizon Europe and other international competitions: **14**

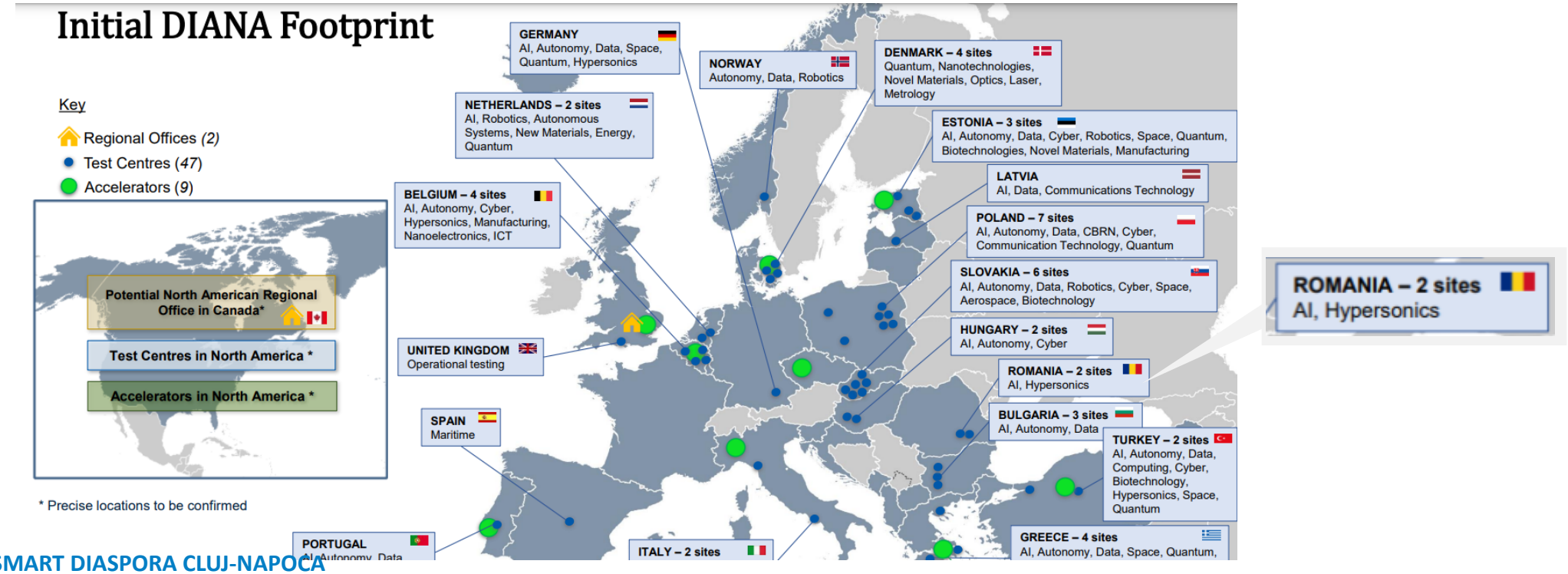
Impact

- The project will develop an ***ecosystem of excellence in the field of AI***, *unique in Romania* both in terms of the scale of R&D activities and its tangible results for the economy.
- This flagship project seeks to consolidate the ***efforts of the entire Romanian AI community, enhancing its visibility*** and impact at the national, European, and global levels.
- It also aims to create national resources that foster development and innovation in the field of AI, while ***providing support to all sectors of society***.



Leader HRIA

The project is coordinated by **Prof. Dr. Eng. Adina Florea and implemented** through the **International Center of Excellence in Artificial Intelligence from POLITEHNICA University Bucharest**.
The center serves as the AI Testing Center of the DIANA (Defense Innovation Accelerator for the North Atlantic) network.



Partner 1 TUCN

The project is implemented through the AI Research Institute of TUCN, which is being transformed from a distributed structure into a unified structure through an investment currently nearing completion. The current components of this structure, funded through the HRIA project, are:

IMAGE PROCESSING AND PATTERN RECOGNITION RESEARCH CENTER **-Perception, scene understanding, risk assessment, planning** **-Intelligent space surveillance** **-Medical imaging**	Sergiu.Nedevschi@cs.utcluj.ro Radu.Danescu@cs.utcluj.ro Tiberiu.Marita@cs.utcluj.ro	IPPRRC
INTELLIGENT SYSTEMS GROUP -Explainable Intelligent Systems, Monitoring and trust in XIS -Agentic AI for complex goals -Multimodal neuro-symbolic models	Adrian.Groza@cs.utcluj.ro Anca.Marginean@cs.utcluj.ro	Intelligent Systems Group
KNOWLEDGE ENGINEERING GROUP -Natural Language Processing (NLP) -Data Engineering (DE) -Neuro Science	Rodica.Potolea@cs.utcluj.ro	Knowledge Engineering Group
SPEECH PROCESSING RESEARCH GROUP -Resources and technologies for automatic speech recognition and text-to-speech synthesis	Mircea.Giurgiu@com.utcluj.ro	Speech processing GROUP
ROBOTICS AND NONLINEAR CONTROL -AI and DNN for intelligent nonlinear control -AI adapted for the control of networked multi-agent systems -AI for the navigation and control of robots and teams	Lucian.Busoniu@aut.utcluj.ro	RCCON ROBOTICS AND NONLINEAR CONTROL

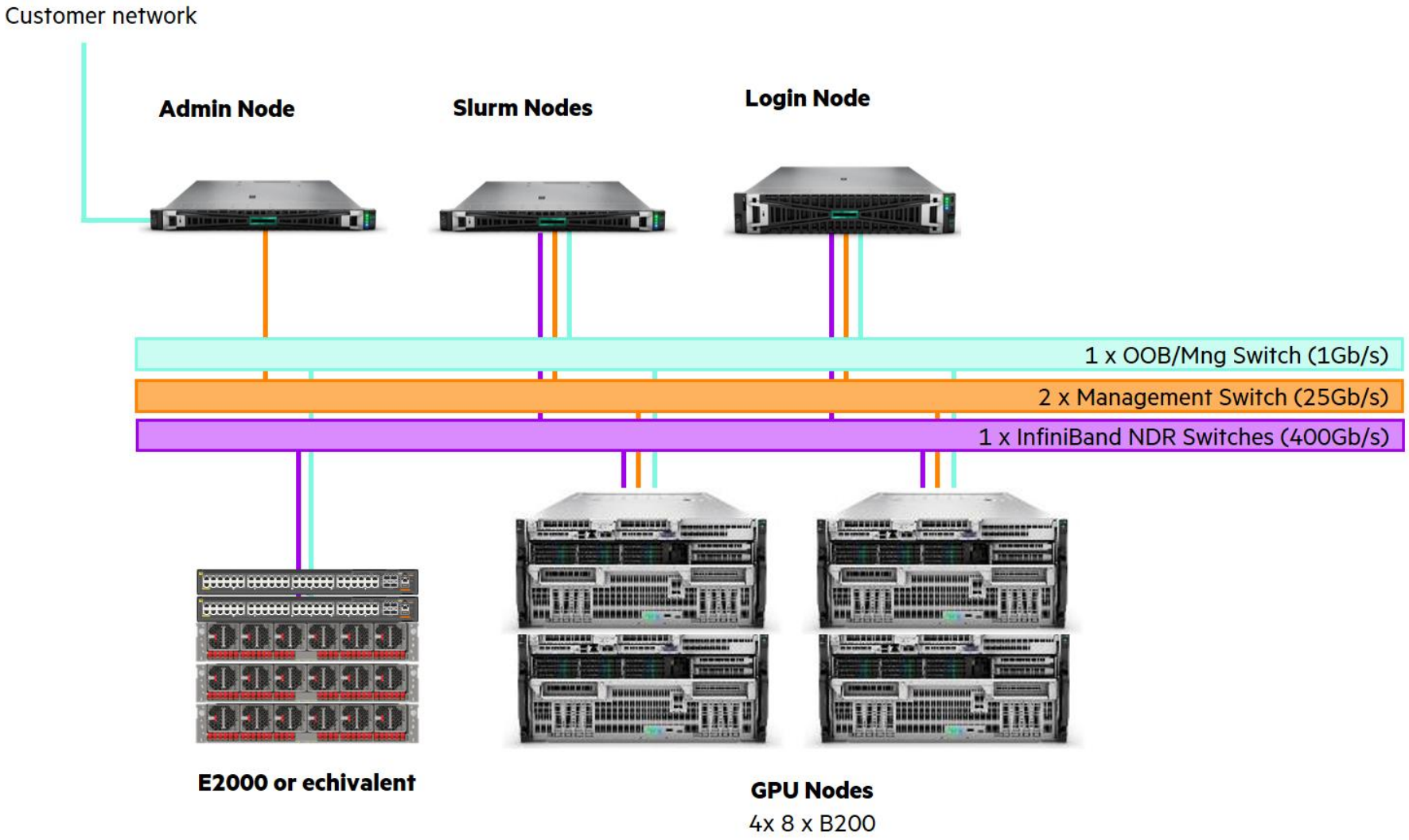
Partner 1 TUCN

INTEGRATED CIRCUITS AND SYSTEMS GROUP **-Development and implementation of AI architectures on FPGA**	Hintea.Sorin@bel.utcluj.ro	
DIGITALLY ENHANCED ANALOG AND RF INTEGRATED CIRCUITS -AI-based tools for the optimized design and sizing of integrated circuits	Marius.Neag@bel.utcluj.ro	
COMPUTER GRAPHICS AND INTERACTIVE SYSTEMS LABORATORY -Techniques for generating, analyzing, and processing Spatial Data using AI Algorithms	Dorian.Gorgan@cs.utcluj.ro	
DISTRIBUTED SYSTEMS RESEARCH LABORATORY -Agentic Digital Twins model for Smart Grid	Tudor.Cioara@cs.utcluj.ro	
RESEARCH CENTER FOR INDUSTRIAL ROBOTS SIMULATION AND TESTING -Parallel robots in the diagnosis and surgical treatment of the pancreas and esophagus -Robotics in oral surgery and dental medicine -Rehabilitation robots for patients with neuro-motor deficits	Doina.Pisla@mep.utcluj.ro	

Funding

Global funding:	€ 65,000,000.00
Equipment:	€ 11,302,738.8
TUCN funding:	€ 11,000,000.00
Equipment:	€ 2,700,000.8
Researchers salary:	€ 6,500,000.0
Researchers:	80 Part-time (24 full-time equivalent) from which 40 PhD and Master students

Infrastructure at TUCN



Cooperation

The Romanian Artificial Intelligence Hub Consortium reaffirms its strong commitment to collaboration with researchers, enterprises, and institutions in Romania, across Europe, and globally.

Through these partnerships, the Consortium seeks to foster synergies, promote innovation, and advance the exchange of knowledge and best practices.

- International cooperation agreements
- Cooperation agreements with Romanian companies
- Cooperation agreements with research entities in Romania



HUB ROMÂN DE INTELIGENȚĂ ARTIFICIALĂ

Vă mulțumesc pentru atenție!