

**Services for PSOs** 









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Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the Ministry of the Enterprises and Made in Italy. Neither the European Union nor the granting authority can be held responsible for them.

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The Public Sector Organizations (PSOs) play a fundamental role in the innovation challenge facing our country, but they need to be profoundly renewed with the most modern tools. ARTES 5.0, thanks to advanced technologies and a scientific approach to innovation, can help the PSOs exploit the potential offered by digitalization to become increasingly efficient, sustainable, and at the service of citizens and territories.





Paolo Dario, Coordinator of ARTES 5.0 and Emeritus Professor of Biorobotics at the Sant'Anna School of Advanced Studies in Pisa Why ARTES 5.0 Can Help You

Who We Are How the Services The Services Provided

ARTES 5.0 is a European Digital Innovation Hub (EDIH) born from a shared vision with the MIMIT (Ministry of Enterprises and Made in Italy) and the European Commission. The core idea of the project is to start from solid scientific and technological expertise and translate it into services offered modularly to companies of all sizes and also to Public Sector Organizations, to promote widespread adoption of digital technologies at the national level, to fuel sustainable value chains centered on the human factor, in line with the Digital Europe program.

The PSOs play a fundamental role in this innovation challenge facing our country, but they need to be profoundly renewed with the most modern tools. ARTES 5.0, thanks to advanced technologies and a scientific approach to innovation, can help the PSOs exploit the potential offered by digitalization to become increasingly efficient, sustainable, and at the service of citizens and territories.

ARTES 5.0 will adopt a human-centric approach, with the aim of promoting the adoption of advanced technologies such as artificial intelligence and robotics by the PSOs, also supporting decisions on where and how.

Our network of partners, structured with a hub & spoke model, brings together universities, research centers, business associations, and companies ready to provide everything the PSOs need: the best technology, skills, infrastructure, tailored training, support services for obtaining funding, and a contribution to creating relationships at the local, national, and European levels.

We are a connected ecosystem at the European level, formed by excellent Italian partners and distributed across the territory.

# A hub & spoke structure to be close to the PSOs

ARTES 5.0 operates as a hub & spoke network: a system of highly qualified poles with complementary skills acting as hubs, and aggregations of public and private actors distributed across the territory (spokes), to capillary reach the needs of Public Sector Organizations.

The partners of ARTES 5.0 (associated partners, affiliated entities, and service providers) have long supported the PSOs, SMEs, and artisan and cooperative enterprises. Together they can cover the needs of Public Sector Organizations in the entire digital transformation process.



Why ARTES 5.0

Who We Are How the Services Work The Services Provided

#### **ARTES 5.0 Partners**

**ARTES 4.0** Advanced Robotics and digital enabling TEchnologies and Systems 4.0, project coordinator, is the national competence center focused on advanced robotics. It carries out awareness-raising, training, and demonstration activities for the diffusion of Industry 4.0 technologies.

CICERO DIH, DIH Toscana and DIH Umbria are part of Confindustria's Digital Innovation Hub network, the main association representing manufacturing and service companies in Italy.

**CINI** is the National Interuniversity Consortium for Computer Science. It brings together 5 research centers focused on artificial intelligence with connections in European and international societies in the field of artificial intelligence.

**DINTEC** is a digital innovation consortium that provides technological innovation services, product qualification, and application of technical standards to micro and SMEs operating in the most typical Made in Italy sectors (agri-food and crafts).

**EDI.it** is Confcommercio's digital innovation hub, an association representing hundreds of thousands of Italian SMEs operating in trade, tourism, and services sectors.

**Fondazione PICO** helps cooperative enterprises grow sustainably and responsibly by leveraging digital innovation.

**Fondazione SYMBOLA** promotes Italian Quality and Green Economy with the aim of strengthening competitiveness.

I-RIM ETS Institute of Robotics and Intelligent Machines was created to promote the use of robotic technologies. It brings together over 200 innovation and research actors to promote the development and adoption of robotics and intelligent machines and serves as a national organizational reference for its associates and stakeholders.

**Intellera** employs over 1,200 professionals, offering organizational, management, and technological consulting services to more than 300 clients in public administration, healthcare, international organizations, and utilities sectors.

**Intesa Sanpaolo** is one of Europe's leading banking groups with intense internal research and innovation activities on digitalization, artificial intelligence, blockchain, and cybersecurity. It participates in the project with its Affiliate Intesa Sanpaolo Innovation Center.

**Intesa Sanpaolo Innovation Center** is the Intesa Sanpaolo Group company dedicated to frontier innovation.

MedITech 4.0 - Mediterranean Competence Centre 4 Innovation is the multi-regional Competence Center, active in Puglia and Campania, born as a facilitator for the adoption of Industry 4.0 enabling technologies by SMEs and Public Administrations and to be a tool for spreading innovation culture and practices in the production of goods and services nationally, particularly in the Mediterranean basin.

**START 4.0** is the national Competence Center led by the National Research Council (CNR) focused on developing Industry 4.0 and



digital security in five application areas: energy, transport, water systems, production, and port activities.

**PSTSicilia** is the EDIH of the Sicily region focused on Artificial Intelligence, identified in the national phase of EDIH candidate selection and merged into ARTES 5.0.

#### **Associated Partners**

**CNA** is an association representing Italian SMEs operating in manufacturing, construction, services, transport, trade, and tourism sectors, with particular attention to the craft sector.

**Confartigianato**, the most representative Italian organization for artisans and micro and small enterprises.

**INAIL**, National Institute for Insurance against Accidents at Work, is a public body that manages mandatory insurance against workplace accidents and occupational diseases and carries out research, study, experimentation, and higher education activities in occupational health and safety.

**ISPRA**, the Higher Institute for Environmental Protection and Research, is the national reference institution for technical-scientific activities and monitoring for environmental protection and environmental sustainability.

## Fill the gaps in skills and technology to modernize your processes and meet the needs of citizens.

ARTES 5.0 innovation services are articulated in 4 service functions:



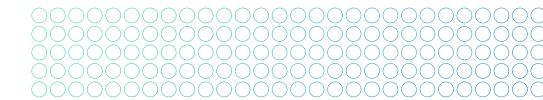
#### **Test Before Invest**

Business challenges meet technical-scientific solutions offered by research centers, allowing you to test cutting-edge technologies before making significant investments.

- Guided assessment of digital maturity on AI and robotics.
- · Knowledge and technology transfer.
- Strategic and specific R&D. Contract research and technical support for the development and scale-up of Proof of Concept.
- Testing and validation of Proof of Concept/prototypes/pilots and products.
- Access to technological infrastructures and platforms (collaborative robotic platforms, sensor-based intelligent systems, IoT, VR/AR technologies, 3D laser scanners, and georadars for digital asset management, Al-based analysis and prediction systems).
- Validation of AI models, aligning them with the ethical principles of the latest European regulations.



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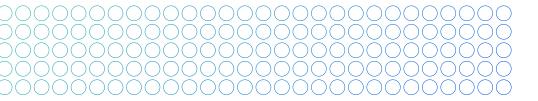


### Training and skills development

Training activities and skills development to support the transition towards Industry 5.0 for PSOs and SMEs.

- Awareness and orientation activities for the digital and green transition.
- Vertical and customized training courses on specific technologies.
- Advanced courses and internships, industrial PhD programs.

## **Focus on services**





## **Support to Find Investments**

ARTES 5.0 partners help businesses and PSOs access economic and financial resources to enable the scalability of their innovative projects.

- Assessment of financial needs and business planning based on business and tech assessment, patent analysis, and financial consulting services.
- Access to public and private funding and the capital market.
- Industrial, financial, and intellectual property protection consulting for project development.



Who We Are

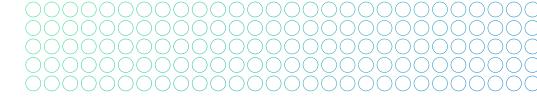
How the Services The Services Provided



# Innovation Ecosystem and Networking

ARTES 5.0 helps SMEs and PSOs connect with national and European partners with the aim of activating new synergies and collaborations.

- Scouting and mapping of ecosystems.
- Ecosystem building and awareness.
- Intermediation services and strategy development.
- Networking services.





## ARTES 4.0



ARTES 4.0 Advanced Robotics and digital enabling technologies and systems 4.0 is the coordinator of the ARTES 5.0 project and is the national competence center focused on Advanced Robotics. It carries out awareness-raising, training, and demonstration activities for the diffusion of Industry 4.0 technologies.

It draws on the experience and facilities of over 140 members, including including 13 universities (coordinated by the Scuola Superiore Sant'Anna in Pisa) and highly qualified research institutes and numerous companies and key organisations for the provision of high-tech technological services. To date, the Competence Centre has evaluated more of 500 innovative projects received from various Italian SMEs, and financed 77 proposals, managing a total budget of 15 million of euro. ARTES 4.0 aims to act as a bridge between research and business, supporting science-driven innovation.

#### **ARTES 4.0 Infrastructure**

ARTES 4.0 has access to all laboratories within its 13 macronodes, located across seven Italian regions, as well as technical support from numerous leading industrial partners.

Available infrastructures include web hosting, access to the hub, 3D printers, robotic platforms, and computing systems.

Why ARTES 5.0 Can Help You Who We Are How the Services Work The Services







ARTES 4.0 is at the forefront of various Industry 4.0 technologies, with strong expertise in robotics, artificial intelligence, neural networks, and additive manufacturing.



#### Where We Operate

ARTES 4.0 operates on-site in 7 regions (Liguria, Sicily, Lazio, Marche, Sardinia, Umbria, Tuscany) and remotely throughout Italy.



official website https://www.artes4.it/en/



## MediTech



MedlTech 4.0 - Mediterranean Competence Centre 4 Innovation is the multi-regional Competence Center, active in Puglia and Campania, established as a facilitator for the adoption of Industry 4.0 enabling technologies by SMEs and Public Administration, serving as a tool for spreading innovation culture and practices in the production of goods and services nationally, particularly in the Mediterranean basin.

It collaborates with 5 Universities in the Campania Region, 3 Apulian Universities, and 22 cutting-edge industrial entities.

#### **MediTech Infrastructure**

MediTech has access to the structures and technologies of PRISMA Lab (Industrial and Service Robotics Projects, Mechatronics and Automation), the laboratory of DIETI (Department of Electrical Engineering and Information Technology) at the University of Naples Federico II.

Available infrastructures include: open source software, test licenses for web-based software, equipment such as virtual reality headsets, IoT devices and sensors, test licenses for web-based software, paid services for access to cloud service providers, robotics hardware, a platform for delivering training courses both synchronously and asynchronously, and the ability to assign customizable certificates and issue Open Badges.

Why ARTES 5.0 Can Help You Who We Are How the Services The Services





#### **MediTech's Leading Technologies**

Through its associates and thanks to available assets, facilities, and competencies, MediTech is at the forefront in Al, Internet of Things, virtual reality, big data, blockchain, Distributed Ledger technologies, and robotics sectors.



#### Where We Operate

MediTech operates on-site and remotely anywhere in Italy, with a focus on the Campania and Puglia regions.



official website
https://meditech4.com/

## **START 4.0**



START 4.0 is the National Competence Center led by the National Research Council (CNR) focused on developing Industry 4.0 and digital security in five application areas: energy, transport, water systems, production, and port activities.

It provides experimental facilities, training, and financial support for developing industrial research and innovation projects through cascade funding to SMEs in Industry 4.0 themes.

#### **START 4.0 Infrastructure**

START 4.0, at its Genoa headquarters, owns and manages an Open Lab called "Scan & Survey" that includes an advanced cloud-based link&share infrastructure, with cutting-edge technologies (including mobile mapping system, Lidar drone, long-range and high-precision laser scanner, GNSS systems, GPR systems, processing software and cloud platforms for data management, IT and visualization components including VR) and expertise that enable digital representation of a wide range of physical resources through Scan-to-BIM (Building information modeling) and 3D Utility Mapping services.

START 4.0 has also developed a proprietary Open Innovation web platform that populates with active users and content, enabling B2B matching based on users' interests and needs who can interact both online and offline.



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#### **START 4.0's Leading Technologies**

Start 4.0 specializes in cutting-edge technologies, instruments, and knowledge that promote security and optimization of infrastructures and production sites: Digital twins, engineering and simulation modeling, virtual reality, location-based applications, cybersecurity, cyber-physical systems, AI, and cloud services.



#### Where We Operate

START 4.0 operates on-site and remotely throughout Italy and the European Union.



official website https://www.start4-0.it/

## CINI



CINI is the National Interuniversity Consortium for Computer Science. It brings together 5 research centers focused on artificial intelligence with connections to European and international societies in the field of artificial intelligence.

CINI owns technological platforms and expertise that are made available for technology transfer, from awareness-raising to preinvestment experimentation.

#### **CINI Infrastructure**

The CINI consortium has access to the structures of AlmageLab, the research laboratory of the "Enzo Ferrari" Engineering Department at the University of Modena and Reggio Emilia (UNIMORE), and the national laboratory of Artificial Intelligence and Intelligent Systems (AIIS). Among the infrastructures made available by the consortium is a GPU computing infrastructure.

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#### **CINI's Leading Technologies**



CINI oversees technological areas related to Al and decision support, new technologies for the audiovisual sector, vision processing sensors and systems, and robotics.



#### Where We Operate

CINI operates on-site in 7 regions (Emilia-Romagna, Lazio, Lombardy, Piedmont, Veneto, and Tuscany) and remotely throughout Italy.



#### official website https://www.consorzio-cini.it/

## **CICERO DIH**



CICERO DIH is part of Confindustria's Digital Innovation Hub network, the main association representing manufacturing and service companies in Italy. Promoted by Unindustria, CNA, and Federlazio, it involves important companies and SMEs in the territory, works with major Universities and Research Centers of excellence present in Lazio, Italy, and Europe, and is open to participation from other regional Associations and all companies interested in digital transformation processes.

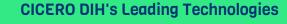
CICERO DIH supports business entities operating in the Lazio region in the digital transformation of their activities to give concrete impetus to the production system's competitiveness.

#### **CICERO DIH Infrastructure**

CICERO DIH offers access to the Competence Center network laboratories, plus cloud space for documents processed during activities carried out within the offered services and software tools to support these activities.

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CICERO DIH oversees technological areas related to process and system integration and cybersecurity.



Where We Operate

CICERO DIH operates on-site in Lazio and remotely anywhere in Italy.



official website
https://www.dihlazio.it/

## **DIH TOSCANA**



The Digital Innovation Hub Tuscany was created in 2017 by Confindustria Toscana, Ance Toscana, and the five regional territories (Confindustria Florence, Confindustria North Tuscany, Pisa Industrial Union, Confindustria South Tuscany, Confindustria Livorno-Massa Carrara), with the aim of increasing the level of knowledge and awareness of Tuscan companies about digital transformation, supporting them in the digital and sustainable transition process, and networking digital innovation actors in the territory.

#### **DIH Toscana Infrastructure**

DIH Toscana has regional dimension and competencies, headquartered at Confindustria Toscana. The organization, lean and contained, prioritizes operativity and flexibility according to the needs of companies and/or users. DIH Toscana operates through a Network of territorial Contact Points (present in the offices of Territorial Industrial Associations) and uses its own network, the national DIH network, and that of the Competence Centers.

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#### **DIH Toscana's Leading Technologies**

Promotion of opportunities and applications related to Artificial Intelligence for small-micro enterprises, through the presentation of advancement cases in life science, cultural heritage care, and mechanics.



#### Where We Operate

DIH Toscana operates on-site in Tuscany and remotely anywhere in Italy.



#### official website

https://www.confindustria.toscana.it/digital-innovation-hub-toscana

## Intellera



Intellera relies on the expertise of over 700 professionals, offering organizational, managerial and technological consulting services to 300 Italian and European institutions and public administrations.

The recipients of the consulting services are national, regional and local public administrations, public economic entities and entities affiliated with the public administration (for example in the utilities sector) and public organizations in the health sector.

#### Intellera's infrastructure

Intellera operates at a national and European level through its three offices in Milan, Rome and Brussels, and can rely on extensive networks, built up over many years, involving policymakers, industry associations and other public authorities. The services offered do not require particular IT infrastructures. To facilitate its clients, Intellera can provide video conferencing services and meeting rooms for 20-30 people.

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#### Intellera's cutting-edge technologies

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Intellera is at the forefront of solutions and technologies related to artificial intelligence, human-computer interaction, cybersecurity and digital twins.



#### Where we operate

Intellera operates on-site and remotely in any area of Italy and also in other European Union countries.



#### official website

https://www.intelleraconsulting.com/

## **DINTEC**



DINTEC -- consortium for technological innovation, is a digital innovation consortium that provides technological innovation services, product qualification, and application of technical standards to micro and SMEs operating in the most typical Made in Italy sectors (agri-food and crafts).

Dintec is an in-house agency of Unioncamere, Chambers of Commerce, and ENEA (National Agency for New Technologies, Energy and Sustainable Economic Development). Its services are mainly aimed at subjects adhering to the Chamber System and include awareness-raising on digital and green 4.0 transition and related facilitation measures.

#### **DINTEC Infrastructure**

DINTEC coordinates the PID-Digital Enterprise Point network of Chambers of Commerce. Over the years, the consortium has built a qualified network of collaborations with institutional subjects, important agencies, and reference associations, such as Ministries, Research Bodies, Trade Associations, and Universities. Why ARTES 5.0 Can Help You Who We Are How the Services The Services



#### **DINTEC's Leading Technologies**

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DINTEC oversees technological areas of communication networks, cybersecurity, web services and applications, and AI.



#### Where We Operate

DINTEC operates on-site at the regional level in Lazio and remotely anywhere in Italy.



official website https://www.dintec.it/

## **PSTSicilia**



PSTSicilia is the EDIH of the Sicily region focused on Artificial Intelligence, identified in the national phase of EDIH candidate selection and merged into ARTES 5.0.

It brings together the main actors of the innovation ecosystem in the Sicily region: 54 public and private subjects that have signed an agreement.

The PSTS-SIKELIA aggregation strengthens ARTES 5.0's presence in Sicily and its orientation in the Mediterranean area.

#### **PSTSicilia Infrastructure**

PSTSicilia offers access to the competencies and technological infrastructures of the rich partner network, with particular reference to those of the National Research Council (CNR) and the 4 Sicilian Universities that will make available 62 qualified laboratories in AI and enabling technologies for digital maturity assessment, demonstrative mockups, testing, experimentation, and development. Universities, CNR, INFN also have 7 classrooms distributed across the territory and laboratories with digital supports for in-person and distance training. Finally, PSTSicilia also provides an Open Innovation platform.



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#### PSTSicilia's Leading Technologies

PSTSicilia offers vertical competencies and cutting-edge technologies in sensors, robotics, computer vision, and Internet of Things.



#### Where We Operate

PSTSicilia addresses Mediterranean realities, with the aim of extending beyond national borders thanks to its strategic position.



#### official website

https://www.pstsicilia.it/

## **ISPRA**



ISPRA is the Italian Institute for Environmental Protection and Research, which develops and provides environmental monitoring and protection services to Public Administrations and private entities.

The institute operates under the supervision and political guidance of the Ministry of the Environment and Energy Security.

#### ISPRA's infrastructure

ISPRA collaborates with numerous European and international scientific and technical environmental bodies and institutes, in implementation of its institutional tasks and in collaboration with the Ministry of the Environment and Protection of the Territory and the Sea (MATTM), the Ministry of Agricultural, Food and Forestry Policies (MIPAAF) and the Ministry of Education, University and Research (MIUR).

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#### **Cutting-edge technologies at ISPRA**



ISPRA is a leader in AI and decision support technologies, particularly in machine learning related to land cover classification and monitoring, and in location-based applications, such as GPS (Global Positioning System) and GIS (Geographic Information System).



#### Where we operate

ISPRA operates throughout the national territory.



#### official website

https://www.isprambiente.gov.it/it

## **I-RIM**



I-RIM ETS, Institute of Robotics and Intelligent Machines, brings together over 200 innovation and research actors to promote the development and adoption of robotics and intelligent machines.

Through its academic associates covering the entire Italian territory, I-RIM conducts activities and organizes periodic events supporting knowledge and adoption of AI technologies.

The Institute organizes scientific and technological events, during which researchers have the opportunity to interact directly with companies about available technologies, updating them, and companies present their results and formulate their needs.

#### **I-RIM** Infrastructure

I-RIM is an association of individuals, based in Pisa: through its associates, professors from major Italian academic institutions, it offers a network covering the national territory.

Why ARTES 5.0 Can Help You Who We Are How the Services Work The Services



#### I-RIM's Leading Technologies

I-RIM plays an active role in robotics and related technologies.



#### **Where We Operate**

I-RIM operates remotely throughout the national territory.



official website https://i-rim.it/it/



### ARTES 4.0 (EDIH site)

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Stay in touch with us