

Italy (IT)

Italy's national initiative for digitising industry is *Piano Nazionale Industria 4.0*.¹ In May 2017, this initiative defined the national network for Industry 4.0 in Italy with the aim of supporting technology transfer and a broader cooperation between the academia and business sector.

DIHs are a crucial pillar of this strategy and 200M€ for the establishment of such centres has been foreseen on a national level. An additional investment of 240M€ was foreseen for the strengthening of technological clusters "Fabbrica Intelligente" and "Agrifood".

On a **national level** Italy has 40 *Digital Innovation Hubs* (24 fully operational and 16 in preparation status) covering various market domains (agriculture, fishing, construction, manufacturing (food products, textiles, chemicals, basic and fabricated metal products, electrical and optical equipment, machinery, electrical equipment), transport, electricity and energy, public administration and defence, education, health and retail) through a large spectrum of technology areas presented as follows:

- Additive manufacturing (3D printing)
- Advanced or High-performance computing
- Artificial Intelligence and cognitive systems
- Augmented and virtual reality, visualization
- Broadband and other communication networks (e.g. 5G)
- Cloud computing
- Cyber security (including biometrics)
- Data mining, big data, database management
- Gamification
- ICT management, logistics and business systems
- Interaction technologies (e.g. human-machine Interaction, motion recognition and language technologies)
- Internet of Things (e.g. connected devices, sensors and actuators networks)
- Internet services (e.g. web development, web production, design, networking, and e-commerce)
- Location based technologies (e.g. GPS, GIS, in-house localization)
- Micro and nano electronics, smart system integration
- New Media technologies
- Photonics, electronic and optical functional materials
- Organic and Large Area Electronics (OLAE)
- Robotics and autonomous systems
- Screens and display technologies
- Sensors, actuators, MEMS, NEMS, RF
- Simulation and modelling
- Software as a service and service architectures

On a **regional level**, each hub's activities seem to be aligned with the RIS3 strategies. A concise list of all hubs on national and regional level is presented as follows:

¹ Piano Nazionale Industria 4.0, <http://www.sviluppoeconomico.gov.it/index.php/it/>, <http://www.mise.gov.it/index.php/it/industria40>

1. Fully operational DIHs

| Hub name | City | NUTS2 region | Country | Smart Specialisation (SS) | Link to SS | AI | HPC | Cyber Security | Association to EU-funded project |
|---|-------------------------|-----------------------|---------|---------------------------|---|----|-----|----------------|----------------------------------|
| AFIL - Lombardy Intelligent Factory Association | Milano | Lombardia | Italy | General innovation | - | X | - | X | I4MS (BEinCPPS) |
| AREA Science Park - IP4FVG | Trieste | Friuli-Venezia Giulia | Italy | General innovation | Advanced technologies and solutions for regional strategic production filiere | X | X | X | - |
| Bioindustry Park Silvano Fumero SpA - bioPmed innovation cluster | Collereto Giacosa | Piemonte | Italy | Bioindustry | Life Sciences Technologies for Wellbeing and Health | - | X | - | - |
| Campania Digital Innovation Hub | Napoli | Campania | Italy | Manufacturing | New materials and technologies for efficient and sustainable manufacturing | X | - | - | - |
| Cineca Consorzio Interuniversitario | CASALE CCHIO DI RENOB | Emilia-Romagna | Italy | General innovation | Healthy living care services and products (Life Sciences) | X | X | - | I4MS (Fortissimo 1&2) |
| DIEX - Digital Experience | San Vito al Tagliamento | Friuli-Venezia Giulia | Italy | Manufacturing | Advanced technologies and solutions for regional strategic production filiere | - | - | X | - |
| Digital Innovation Hub Basilicata | Potenza | Basilicata | Italy | General innovation | - | - | - | - | - |
| DIGITAL INNOVATION HUB BELLUNO DOLOMITI | FELTRE | Veneto | Italy | General innovation | New technologies for the creative industries | - | - | - | - |
| Digital Innovation Hub Liguria | Genova | Liguria | Italy | General innovation | - | - | - | - | - |
| Digital Innovation Hub Lombardia | Milano | Lombardia | Italy | General innovation | - | X | - | - | - |
| Digital Innovation Hub Piemonte | Torino | Piemonte | Italy | General innovation | - | - | - | - | - |

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|---|---------------|-------------------------|----------------|--------------------------------------|---|-----------|------------|---------------------------|---|
| Digital Innovation Hub Vicenza | Vicenza | Veneto | Italy | Manufacturing | New technologies for the creative industries | X | - | X | - |
| DIH Marche - 4M.0 | Ancona | Marche | Italy | General innovation | ICT | X | X | X | - |
| DIHV | Rome | Lazio | Italy | Cybersecurity | - | X | - | X | - |
| innovation experience HUB (InnexHUB) | Brescia | Lombardia | Italy | General innovation | - | X | - | - | - |
| MEDISDIH - Apulian Mechatronics Technological Cluster and Digital Innovation Hub | Valenza no | Puglia | Italy | Mechatronics | Mechatronics | X | X | X | - |
| Hub name | City | NUTS2 region | Country | Smart Specialisation (SS) | Link to SS | AI | HPC | Cyber Security | Association to EU-funded project |
| PARSEC HUB | Genova | Nord- Ovest | Italy | General innovation | - | X | - | - | - |
| Politecnico di Milano | Milano | Lombardia | Italy | General innovation | - | X | X | X | I4MS (BEinCPPs, MIDIH, L4MS) |
| Regional Platform Industry 4.0 of Tuscany Region (Tuscan Platform Industry 4.0) | Firenze | Toscana | Italy | General innovation | - | X | X | X | - |
| RIF BioRobotics Institute | Pontede ra | Toscana | Italy | Robotics | - | X | - | - | ECHORD++ |
| SMILE-DIH (Smart Manufacturing Innovation for Lean Excellence center - Digital Innovation Hub) | Parma | Emilia- Romagna | Italy | Manufacturing | Advanced processes and technologies for efficient and sustainable manufacturing | X | - | - | - |
| SPEEDHUB | Verona | Veneto | Italy | General innovation | New technologies for the creative industries | X | X | X | - |
| t2i - DIH Triveneto | Treviso | Veneto | Italy | General innovation | New technologies for the creative industries | - | X | - | I4MS (Fortissimo 2) |
| Umbria Digital Innovation Hub | Perugia | Umbria | Italy | General innovation | Strengthening business innovation | - | - | X | - |

2. In preparation DIHs

| Hub name | City | NUTS2 region | Country |
|---|---------------|------------------------------|---------|
| Alma Mater Studiorum - Università di Bologna | Bologna | Emilia-Romagna | Italy |
| Apulia CPS/IoT Hub for Regional Digital Manufacturing SMEs | Bari | Puglia | Italy |
| ARSCONTROL | Reggio Emilia | Emilia-Romagna | Italy |
| C.R.E.A.T.E. Consorzio di Ricerca per l'Energia, l'Automazione e le Tecnologie dell'Elettromagnetismo | Napoli | Campania | Italy |
| Cicero DIH Lazio | Roma | Lazio | Italy |
| Digital Innovation Hub Sardegna | Cagliari | Sardegna | Italy |
| Digital Innovation Hub Toscana | Firenze | Toscana | Italy |
| Digital Innovation Hub Trentino-Alto Adige/Suedtirol | Trento | Provincia Autonoma di Trento | Italy |
| DIH - Calabria | Cosenza | Calabria | Italy |
| DIH Sicilia | Catania | Sicilia | Italy |
| DIH Udine | Udine | Friuli-Venezia Giulia | Italy |
| Italian Institute of Technology | Genova | Liguria | Italy |
| Laboratory for Advanced Mechatronics - LAMA FVG | Udine | Friuli-Venezia Giulia | Italy |
| Match 4.0 Abruzzo DIH | L'Aquila | Abruzzo | Italy |
| Hub name | City | NUTS2 region | Country |
| National Technological Cluster of Intelligent Factories | Bologna | Emilia-Romagna | Italy |
| Trentino Innovation Hub | Trento | Provincia Autonoma di Trento | Italy |

3. RTOs/universities that had a DIH role in an EU project

A list of RTOs/universities that have participated in the EU FP7 and H2020 projects, and *are not mentioned above*, is presented in the following tables:

a. H2020 participation²

| Project Topic Code | Project Acronym | Project Duration | Project End Date | Participant Legal Name | Participant Role | Participant Short Name | Core Legal Entity Type | Research Organisation | Project Topic Code |
|--------------------|-----------------|------------------|------------------|------------------------|------------------|------------------------|------------------------|-----------------------|--------------------|
| FoF-09-2015 | Fortissimo 2 | 36 | 31/10/2018 | HYPERTEC SOLUTION SRL | PARTICIPANT | HYPERTEC | PRIVATE | No | FoF-09-2015 |
| FoF-09-2015 | Fortissimo 2 | 36 | 31/10/2018 | TEXA SPA | PARTICIPANT | TEXA | PRIVATE | No | FoF-09-2015 |
| FoF-09-2015 | Fortissimo 2 | 36 | 31/10/2018 | PROSERVICE SRL | PARTICIPANT | PROSERV | PRIVATE | No | FoF-09- |

² Data available in CORDIS (http://cordis.europa.eu/home_en.html) and in the European Commission databases.

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|---------------------------|------------------------|-------------------------|-------------------------|--|-------------------------|-------------------------------|-------------------------------|------------------------------|---------------------------|
| | | | | | | | | | 2015 |
| FoF-09-2015 | Fortissimo 2 | 36 | 31/10/2018 | ALSTOM FERROVIARIA SPA | PARTICIPANT | ALSTOM | PRIVATE | No | FoF-09-2015 |
| FoF-09-2015 | Fortissimo 2 | 36 | 31/10/2018 | STAMTECH SRL | PARTICIPANT | STAM | PRIVATE | No | FoF-09-2015 |
| FoF-09-2015 | BEinCPPS | 36 | 31/10/2018 | ASSOCIAZIONE FABBRICA INTELLIGENTE LOMBARDIA | PARTICIPANT | AFIL | PRIVATE | No | FoF-09-2015 |
| FoF-09-2015 | BEinCPPS | 36 | 31/10/2018 | HOLONIX SRL-SPIN OFF DEL POLITECNICO DI MILANO | PARTICIPANT | HLX | PRIVATE | No | FoF-09-2015 |
| FoF-09-2015 | BEinCPPS | 36 | 31/10/2018 | Whirlpool Europe srl | PARTICIPANT | WHR | PRIVATE | No | FoF-09-2015 |
| FoF-09-2015 | BEinCPPS | 36 | 31/10/2018 | ENGINEERING - INGEGNERIA INFORMATICA SPA | PARTICIPANT | ENG | PRIVATE | No | FoF-09-2015 |
| FoF-09-2015 | I4MS-Growth | 30 | 28/02/2018 | HOLONIX SRL-SPIN OFF DEL POLITECNICO DI MILANO | PARTICIPANT | HOLONIX | PRIVATE | No | FoF-09-2015 |
| FOF-12-2017 | MIDIH | 36 | | CEFRIEL - SOCIETA CONSORTILE A RESPONSABILITA LIMITATA | PARTICIPANT | CEFRIEL | PRIVATE | Yes | FOF-12-2017 |
| FOF-12-2017 | MIDIH | 36 | | ENGINEERING - INGEGNERIA INFORMATICA SPA | PARTICIPANT | ENG | PRIVATE | No | FOF-12-2017 |
| FOF-12-2017 | MIDIH | 36 | | CENTRO RICERCHE FIAT SCPA | PARTICIPANT | CRF | PRIVATE | Yes | FOF-12-2017 |
| FOF-12-2017 | L4MS | 42 | | ENGINEERING - INGEGNERIA INFORMATICA SPA | PARTICIPANT | ENG | PRIVATE | No | FOF-12-2017 |
| FOF-12-2017 | AMable | 48 | | POLITECNICO DI TORINO | PARTICIPANT | POLITO | PUBLIC | Yes | FOF-12-2017 |
| FOF-12-2017 | CloudiFacturing | 42 | | Jonica Impianti S.r.l. | PARTICIPANT | JIMP | PRIVATE | N/A | FOF-12-2017 |
| FOF-12-2017 | CloudiFacturing | 42 | | Cooperlat Soc. Coop. Agricola | PARTICIPANT | Trevalli | PRIVATE | No | FOF-12-2017 |
| FOF-12-2017 | CloudiFacturing | 42 | | STAM SRL | PARTICIPANT | STAM | PRIVATE | No | FOF-12-2017 |
| FOF-12-2017 | CloudiFacturing | 42 | | ZANNINI-SPA | PARTICIPANT | ZAN | PRIVATE | No | FOF-12-2017 |
| FOF-12-2017 | CloudiFacturing | 42 | | CENTRO DI PROGETTAZIONE, DESIGN & TECNOLOGIE DEI MATERIALI | PARTICIPANT | CETMA | PRIVATE | Yes | FOF-12-2017 |
| FOF-12-2017 | CloudiFacturing | 42 | | ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA | PARTICIPANT | UNIBO | PUBLIC | Yes | FOF-12-2017 |
| Project Topic Code | Project Acronym | Project Duration | Project End Date | Participant Legal Name | Participant Role | Participant Short Name | Core Legal Entity Type | Research Organisation | Project Topic Code |

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|------------------|------------|----|------------|--|-------------|------------------------|---------|-----|------------------|
| ICT-01-2014 | EuroCPS | 36 | 31/01/2018 | STMICROELECTRONICS SRL | PARTICIPANT | STMICROELECTRONICS SRL | PRIVATE | No | ICT-01-2014 |
| ICT-01-2014 | EuroCPS | 36 | 31/01/2018 | ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA | PARTICIPANT | UNIBO | PUBLIC | Yes | ICT-01-2014 |
| ICT-04-2017 | TETRAMAX | 48 | 31/08/2021 | UNIVERSITA DI PISA | PARTICIPANT | PISA | PUBLIC | Yes | ICT-04-2017 |
| ICT-04-2017 | FED4SAE | 36 | 31/08/2020 | STMICROELECTRONICS SRL | PARTICIPANT | ST-I | PRIVATE | No | ICT-04-2017 |
| ICT-14-2016-2017 | Data Pitch | 36 | 31/12/2019 | TELECOM ITALIA SPA | PARTICIPANT | TIM | PRIVATE | No | ICT-14-2016-2017 |

b. FP7 participation²

| Project Number | Project Acronym | Project Duration | Project Start Date | Project End Date | Project Number of Participants | Participant Short Name | Participant Legal Name | Participant Role | Organisation Type |
|----------------|-----------------|------------------|--------------------|------------------|--------------------------------|------------------------|--|------------------|-------------------|
| 608849 | EuRoC | 48 | 01-Jan-2014 | 31-Dec-2017 | 48 | UNIPD | UNIVERSITA DEGLI STUDI DI PADOVA | Participant | HES |
| 608849 | EuRoC | 48 | 01-Jan-2014 | 31-Dec-2017 | 48 | MCM | MACHINING CENTERS MANUFACTURING S.P.A. | Participant | PRC |
| 608849 | EuRoC | 48 | 01-Jan-2014 | 31-Dec-2017 | 48 | STAM | STAM SRL | Participant | PRC |
| 608849 | EuRoC | 48 | 01-Jan-2014 | 31-Dec-2017 | 48 | LOCCIONI | AEA s.r.l. | Participant | PRC |
| 608849 | EuRoC | 48 | 01-Jan-2014 | 31-Dec-2017 | 48 | ITR | IT+ROBOTICS SRL | Participant | PRC |
| 608849 | EuRoC | 48 | 01-Jan-2014 | 31-Dec-2017 | 48 | IIT | FONDAZIONE ISTITUTO ITALIANO DI TECNOLOGIA | Participant | REC |
| 608849 | EuRoC | 48 | 01-Jan-2014 | 31-Dec-2017 | 48 | CNR | CONSIGLIO NAZIONALE DELLE RICERCHE | Participant | REC |
| 608849 | EuRoC | 48 | 01-Jan-2014 | 31-Dec-2017 | 48 | TLABS | Telerobot Labs S.r.l. | Participant | PRC |
| 608849 | EuRoC | 48 | 01-Jan-2014 | 31-Dec-2017 | 48 | IMA | I.M.A. INDUSTRIA MACCHINE AUTOMATICHE SPA | Participant | PRC |
| 608886 | CloudSME | 33 | 01-Jul-2013 | 31-Mar-2016 | 29 | BASE | BASE PROTECTION SRL | Participant | PRC |
| 608886 | CloudSME | 33 | 01-Jul-2013 | 31-Mar-2016 | 29 | IOR | ISTITUTO ORTOPEDICO RIZZOLI | Participant | REC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | UTV | UNIVERSITA DEGLI STUDI DI ROMA TORVERGATA | Participant | HES |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | ENGINSOFT | ENGINSOFT SPA | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | UNIVAQ | UNIVERSITA DEGLI STUDI DELL'AQUILA | Participant | HES |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | SCRIBA | SCRIBA NANOTECNOLOGIE SRL | Participant | PRC |

| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | OPT | Optimad engineering s.r.l. | Participant | PRC |
|----------------|-----------------|------------------|--------------------|------------------|--------------------------------|------------------------|--|------------------|-------------------|
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | PRYSMIAN | PRYSMIAN | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | UNIMORE | UNIVERSITA DEGLI STUDI DI MODENA E REGGIO EMILIA | Participant | HES |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | HOLONIX | HOLONIX SRL-SPIN OFF DEL POLITECNICO DI MILANO | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | CINECA | CONSORZIO INTERUNIVERSITARI O CINECA | Participant | REC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | ERGOLINES | ERGOLINES LAB SRL | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | IMR | IMR ENGINEERING & TECHNOLOGIES SRL | Participant | PRC |
| Project Number | Project Acronym | Project Duration | Project Start Date | Project End Date | Project Number of Participants | Participant Short Name | Participant Legal Name | Participant Role | Organisation Type |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | MOXOFF | MOXOFF SRL-SPIN OFF DEL POLITECNICO DI MILANO | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | ALA | AUTOMOBILI LAMBORGHINI SPA | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | VE&D | vehicle engineering and design s.r.l. | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | PROGESI | PROGESI SPA | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | HSL | HSL SRL A SOCIO UNICO | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | ZECO | ZECO DI ZERBARO E COSTA E C SRL | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | eAmb | eAMBIENTE SRL | Participant | PRC |
| 609029 | FORTISSIMO | 42 | 01-Jul-2013 | 31-Dec-2016 | 123 | Nolangroup | NOLANGROUP SPA | Participant | PRC |
| 609046 | LASHARE | 48 | 01-Sep-2013 | 31-Aug-2017 | 69 | CRF | CENTRO RICERCHE FIAT SCPA | Participant | REC |
| 609046 | LASHARE | 48 | 01-Sep-2013 | 31-Aug-2017 | 69 | PRIMA | PRIMA INDUSTRIE SPA | Participant | PRC |
| 609046 | LASHARE | 48 | 01-Sep-2013 | 31-Aug-2017 | 69 | SSE | SOLAR SYSTEMS & EQUIPMENT S.R.L. | Participant | PRC |
| 609100 | CloudFlow | 46 | 01-Jul-2013 | 30-Apr-2017 | 47 | TTS | TTS TECHNOLOGY TRANSFER SYSTEMS SRL | Participant | PRC |
| 609100 | CloudFlow | 46 | 01-Jul-2013 | 30-Apr-2017 | 47 | FICEP | FICEP S.P.A. | Participant | PRC |
| 609100 | CloudFlow | 46 | 01-Jul-2013 | 30-Apr-2017 | 47 | STAM | STAM SRL | Participant | PRC |
| 609306 | INTEFIX | 36 | 01-Jul-2013 | 30-Jun-2016 | 33 | MARPOSS | Marposs SpA | Participant | PRC |
| 609306 | INTEFIX | 36 | 01-Jul-2013 | 30-Jun-2016 | 33 | UNIFI | UNIVERSITA DEGLI STUDI DI FIRENZE | Participant | HES |
| 609306 | INTEFIX | 36 | 01-Jul-2013 | 30-Jun-2016 | 33 | TECMA | TECMA SRL | Participant | PRC |
| 609306 | INTEFIX | 36 | 01-Jul-2013 | 30-Jun-2016 | 33 | GIRAR | GIRARDINI SRL | Participant | PRC |

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|--------|--------|----|-------------|-------------|----|--------|-------------------------------|-------------|-----|
| 609355 | APPOLO | 48 | 01-Sep-2013 | 31-Aug-2017 | 36 | CRF | CENTRO RICERCHE FIAT SCPA | Participant | REC |
| 609355 | APPOLO | 48 | 01-Sep-2013 | 31-Aug-2017 | 36 | BIOAGE | BIOAGE SRL | Participant | PRC |
| 609355 | APPOLO | 48 | 01-Sep-2013 | 31-Aug-2017 | 36 | IRIS | IRIS SRL | Participant | PRC |
| 609355 | APPOLO | 48 | 01-Sep-2013 | 31-Aug-2017 | 36 | OPI | OPI PHOTONICS SRL | Participant | PRC |
| 609355 | APPOLO | 48 | 01-Sep-2013 | 31-Aug-2017 | 36 | OSAI | OSAI AUTOMATION SYSTEM SPA | Participant | PRC |
| 609355 | APPOLO | 48 | 01-Sep-2013 | 31-Aug-2017 | 36 | LAC | LAC SPA | Participant | PRC |
| 609355 | APPOLO | 48 | 01-Sep-2013 | 31-Aug-2017 | 36 | SISMA | SISMA SPA | Participant | PRC |

4. Regions in Italy that have no DIHs

- Molise
- Provincia Autonoma di Bolzano/Bozen
- Valle d'Aosta/Vallée d'Aoste