

Grant Agreement N°857191

Distributed Digital Twins for industrial SMEs: a big-data platform

Deliverable 8.3 – Dissemination Plan (I)



Document Identification

Project	IoTwins
Project Full Title	Distributed Digital Twins for industrial SMEs: a big-data platform
Project Number	857191
Starting Date	September 1st, 2019
Duration	3 years
H2020 Programme	H2020-EU.2.1.1 INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)
Topic	ICT-11-2018-2019 - HPC and Big Data enabled Large-scale Test-beds and Applications
Call for proposal	H2020-ICT-2018-3
Type of Action	IA-Innovation Action
Website	iotwins.eu
Work Package	WP8
WP Leader	ART-ER
Responsible Partner(s)	ART-ER
File Name	DELIVERABLE 8.3 – DISSEMINATION PLAN (I)
Contractual delivery date	M6
Actual delivery date	29/2/2020
Version	1
Status	Final
Dissemination level	Public
Author	Luisa Secci, Debora Facchini, Daniele Sangiorgi
Contact details of the coordinator	Francesco Millo, francesco.millo@bonfiglioli.com



Table of Contents

D	ocumei	nt Ide	entification	2
In	troduc	tion		4
1	Obje	ective	es	5
2	Des	cripti	on of the project assets	6
3	Targ	get G	roups	7
4	Diss	emir	nation channels and tools	9
	4.1	Part	tners' channels and tools	9
	4.2	Scie	ntific publications	10
	4.3	Оре	en Science platforms	11
	4.4	Proj	ject website	11
	4.5	Twi	tter account	11
	4.6	Pres	ss and Media relations	12
	4.7	Eve	nts	12
	4.7.	1	Dissemination events kit	13
	4.7.	2	Company guided tours and technical workshops	13
	4.7.	3	Conferences and workshops	14
	4.7.	4	Trade Fairs and other Exhibitions	20



Introduction

According to the EC Research & Innovation Participant Portal Glossary/Reference Terms, **dissemination** can be referred to as "the public disclosure of the results by any appropriate means (other than resulting from protecting or exploiting the results), including scientific publications in any medium", whose objective is **transferring knowledge and results with the aim to enable others to use and take up results**, stimulating further research activities, thus maximizing the impact of EU-funded research.

Dissemination and communication are tied with each other, and sometimes a communication action can end up with producing a dissemination outcome; in this sense, communication actions can often overlap and cross with dissemination ones.

The Dissemination Plan plays an essential role in involving and informing the research and industrial communities, attracting and engaging SMEs in the manufacturing and service sector. The IoTwins dissemination plan is a 'living document', enriched and improved as the project unfolds and progresses. It is necessary to review the strategy periodically to see what has worked, and what did not, what we should do more of or less of. The plan should answer to the communication needs of all partners - and stakeholders, too - and facilitate the flow of information about the project among all actors involved.

The Dissemination Plan will include:

- 1. the overall scope and specific dissemination objectives to achieve
- 2. the description of the project assets (what to disseminate)
- 3. the target groups (who will be informed and engaged)
- 4. the communication tools for different audiences

This Plan will be yearly updated to ensure the alignment with the project timing and results.



1 Objectives

IoTwins **Dissemination Plan** is conceived to provide due relevance to research results and create pathways towards different target groups all along the project life.

It includes a list of actions and tools, toward all partners involved in the implementation of the activities, designed to:

- inform on the objectives and intermediate and final results of the project and disseminate the results towards potential users and beneficiaries
- reach national and international networks and organisations
- build participation and consensus around it.

The IoTwins project is composed by many groups that are involved at different levels across the project organizational hierarchy, namely:

- Consortium level: the 23 IoTwins partners;
- **Network of stakeholders:** organisations that, without being partners in the project, have expressed their deep interest in supporting and being updated on project activities;
- **Interested audience:** relevant audience that IoTwins partners will keep informed during the project lifetime, that will be better detailed throughout the document.

In the next section IoTwins project assets are introduced and they represent the main "objects" we are going to communicate with the specific action described in section 3 and 4.



2 Description of the project assets

IoTwins is an European project that aims to build a reference architecture for the development of efficient and distributed **digital twins** for specific manufacturing and facility management domains.

12 dedicated large-scale testbeds will collect large amounts of data to generate and refine the associated digital twins, including optimized models of resources, systems and processes involved. IoTwins digital twins will be used to improve the efficiency of production processes and of facility management, as well as to demonstrate the replicability of the achieved results in similar scenarios and to determine new application areas and business models.

All the IoTwins testbeds share the same methodology: models that exploit big data and domain expert knowledge to accurately represent a complex system, such as an industrial plant, or a process, or a facility, with the aim of predicting its temporal evolution and dynamics. The underlying technologies ground on the concept of distributed IoT-/edge-/cloud-enabled hybrid twins.

Key technological elements of the IoTwins approach are:

- a full-fledged platform enabling easy and rapid access to heterogeneous cloud HPC-based resources for advanced big data services;
- intelligent services to simplify and accelerate the integration of advanced Machine Learning algorithms, physical simulation, on-line and off-line optimization into distributed digital twins;
- advanced edge-oriented mechanisms, tools, and orchestration to support **Quality of Service** in the runtime execution of the distributed digital twins.

The **12 testbeds** are grouped in **three categories**:

MANUFACTURING TESTBEDS

4 industrial pilots providing predictive maintenance services that exploit sensors data to forecast the time to failure and produce maintenance plans that optimize maintenance costs:

- Wind turbine predictive maintenance Bonfiglioli Riduttori and KK Wind Solutions
- Machine tool spindle predictive behaviour FILL and TTTECH COMPUTERTECHNIK AG
- Predictive maintenance for a crankshaft manufacturing system ETXE-TAR
- Predictive maintenance and production optimization for closure manufacturing GCL International

FACILITY MANAGEMENT TESTBEDS

3 testbeds for identification of criticalities, optimization techniques to provide efficient facility management plans, operation optimal schedules, and renovation/maintenance plans:

- NOU CAMP Sport facility management and maintenance FUTBOL CLUB BARCELONA and BARCELONA SUPERCOMPUTING CENTER
- EXAMON Holistic supercomputer facility management CINECA
- Smart Grid facility management for power quality monitoring SIEMENS

REPLICABILITY TESTBEDS

5 testbeds to demonstrate the replicability and the scalability of the IoTwins platform and of the former manufacturing and facility management testbeds:

- Patterns for smart manufacturing for SMEs CETIM
- EXAMON replication to other data centre facilities CINECA, INFN and BARCELONA SUPERCOMPUTING CENTER
- Standardization/homogenization of manufacturing performance GCL International
- NOU CAMP replicability towards smaller scale sport facilities FUTBOL CLUB BARCELONA
- Innovative business models for IoTwins PaaS in manufacturing MARPOSS



3 Target Groups

In general, the main dissemination target can be summarized as follows:

- Scientific community
- Industrial partners
- Policy makers

In the table below the project's specific audience are introduced. Based on this, the appropriate dissemination channels will be identified along with the most suitable tools.

TARG	ET	HOW TO REACH THEM	
WHO	FIELD OF	INITIATIVES	OTHER CHANNELS
	ACTIVITY		
SMEs keen to implement Industry 4.0 platforms	Manufacturing	 Events Pilots' (testbeds) visits Meetings Conferences and workshops Open Days EC specific initiatives, such as Id=MS, ICT Innovation for Manufacturing SMEs and Enterprise Europe Network 	 Online and traditional media coverage Social networks IoTwins website Partners 'and stakeholders' websites E-newsletters
		Open innovation initiativesBrokerage events	
All actors along specific value chains, including OEMs and owners/operators of facilities	Value chain within the wind, automotive, sports' events, aeronautic sectors Wind, Automotive, Sports Events, Aeronautic Sectors Value Chains Energy and manufacturing	 Events Meetings Conferences and workshops Pilots' (testbeds) visits organisation Fairs/exhibitions Events organized by entrepreneurial associations Pilots' (testbeds) visits Ad hoc meetings Open innovation initiatives Brokerage events 	 Online and traditional media coverage Social networks IoTwins website Partners 'and stakeholders' websites E-newsletters
SMEs, Research Centres, Universities developing Industry 4.0 initiatives, including IoTwins Partners	Distributed edge/cloud, Big Data and IoT Industry 4.0	 Open Days Fairs/exhibitions National/EU level events on ICT Entrepreneurial associations' events Scientific Congresses Open innovations initiatives Brokerage events 	 Publications in scientific journals LinkedIn threads, discussions



Broader scientific community (including universities and R&D centres, R&D teams, Ph.D.s, post-doc candidates)		 Seminars and webinars within UNIBO, BSC, FOKUS, TUB, INFN and CINECA Open innovations initiatives Brokerage events 	 Publications in scientific journals Post-doc courses that will be started during the project LinkedIn threads, discussions Research Gate OpenAIRE other European Platforms and initiatives
IoTwins Partners and stakeholders		 Conferences Brokerage events (e.g. Enterprise Europe Network initiatives) Events related to the following organisations: Big Data PPP (BDVA), of which CINECA, BSC, ESI, FOKUS, and UNIBO are already members ETP4HPC: of which CINECA, BSC, FOKUS, INFN and UNIBO are already members 	Communication among partners that are already members of these platforms
Policy Makers and EC directorates, i.e. relevant departments of the EC Standardization bodies	DG ENER DG DIGIT DG CONNECT DG RTD DG MOVE DG CLIMA DG ENV	Direct contacts and networking initiatives Workshop organisations with industries and public institutions Conferences Events	
Regional, National authorities and general public	i.e. CEN and CENELEC	Approached through national press releases, pilots' visits workshops, summer schools, etc.	



4 Dissemination channels and tools

For information to circulate with ease among partners, a set of tools was prepared. It includes:

4.1 Partners' channels and tools

This plan takes into account that all organizations involved in the IoTwins project are part of bigger innovation ecosystems, at the centre of local, national and international relations and are, in turn, members of different **networks**, **associations and hubs** active at various levels in the fields of the project. Single organizations can thus act as **amplifiers and multipliers of the project's results** towards these networks and their own local territories as well.

As for their own communication channels, all partners can count on corporate websites and social media pages, that could be profitably exploited as further channels to multiply the impact of project dissemination actions.

The table that follows includes a first mapping of all channels, including events, initiatives, networks, websites, e-newsletters and social media accounts through which IoTwins partners can contribute to disseminate project's results. The next plan will include a more complete mapping of all partners' tools.

PARTNER	NETWORKS AND INITIATIVES	MEDIA CHANNEL
FCB	- Digital Innovation Hubs (DIHs) though	Website
	Barcelona Innovation Hub (BIHUB): BIHUB is an	Social media
	ecosystem that drives knowledge and	
	innovation. BIH ecosystem works to boost	
	cutting edge technology and innovation	
	generating relevant impact in the sports industry working closely with key partners,	
	such as brands, universities, research centers,	
	start-ups, entrepreneurs or large enterprises;	
	- FCB Universitas: FCB's centre for the creation	
	and transmission of knowledge and innovation.	
	It promotes an open and collaborative	
	ecosystem with brands, universities and	
	research centres from around the world (MIT,	
	Stanford, Hardvard, Georgetown, ESADE, IESE	
	and University of Beijing) and aims to position	
	FCB as a leading referent in knowledge	
	dissemination in the sports world, through activities such as online streaming of	
	workshops held by the Club, the launch of	
	innovation challenges on a global scale, and	
	online courses, which are all tools for sharing	
	the Club's knowledge	
BSC	-	www.bsc.es
MARP		https://www.marposs.com/eng/
BRI		https://www.bonfiglioli.com/en
INFN		http://home.infn.it/en
CINECA		www.cineca.it
		www.hpc.cineca.it
UNIBO		https://www.unibo.it
		<u>Twitter</u>



		·II. IOIWIIIS
		<u>Facebook</u>
		<u>Instagram</u>
FOKUS	http://iiot-forum.org	
	https://iiot-center.org	
TTT	https://www.openfogconsortium.org	https://www.tttech.com/products/indus
	https://www.iiconsortium.org	trial/industrial-iot/fog-computing-nerve
		https://www.tttech.com/technologies/d
		eterministic-ethernet
THALES	Thales group internal technical seminars, that will	Thales SIX GTS France intranet
	occur at least once per year during the project, and	
	probably during one year after project ending.	
SIEMENS	EM related fairs, Distributech, European Utility	
	Week	
	MindSphere Application Center (MAC): this is a co-	
	creation platform, along with customers	
	"Industrial IoT@Siemens" conference series in	
	Nuremberg	
ART-ER	Data Valley and the whole Emilia-Romagna	www.art-er.it
	Innovation Ecosystem:	https://twitter.com/Arter_ER
	- Big Data Association	https://www.facebook.com/arteremiliar
	- Big Data and Artificial Intelligence for Human	omagna
	Development	https://www.instagram.com/arteremiliar
	- High Technology Network	omagna/ https://www.linkedin.com/company/art-
	- Clust-ERs Associations	er/
	- S3 Platforms "Traceability & Big Data" and	https://www.youtube.com/channel/UC
	"Artificial Intelligence & Human machine	MIPaepIFW9G6DXnSRzEaxQ
	interface"	2.5p 1.0 002711.311224700
	 Vanguard Initiative 	

This mapping is still partial and will be further improved in the next versions of the Plan.

4.2 Scientific publications

IoTwins scientific results will be widely disseminated by the research partners through **peer-reviewed journals and other scientific publications**. The addressed journals will cover all the relevant project's topics: AI, IoT, Big Data, Cloud, Edge/Fog Computing, Simulation and Data Management.

WP8 will be in charge of the dissemination of such knowledge to mainstream channels, which will also be subject to a reformulation of the main concepts into a widely understandable and suitable language.

All papers published by partners in the framework of IoTwins project will include the following sentence:

AKNOWLEDGEMENT

This research was partly (or fully) supported by the H2020 IoTwins project (Distributed Digital Twins for industrial SMEs: a big-data platform) funded by the EU under the call ICT-11-2018-2019, Grant Agreement № 857191.

The next Plan update will include the list of papers submitted and accepted for publication.

Moreover, any dissemination of results must indicate that it reflects only the author's view and that the European Commission is not responsible for any use that may be made of the information it contains.



4.3 Open Science platforms

Each beneficiary must ensure open access (free of charge, online access for any user) to all peer-reviewed scientific publications relating to its results.

Rather than keeping data and materials (and ideas) within the confines of academic research labs, open science invites anyone to observe, contribute, and create. Researchers are part of a society composed mostly of nonscientists who fund, participate in, benefit from, and in some cases are the subjects of their research. At the heart of the open-science movement is the conviction that research in all fields must be performed in dialogue with society - a responsibility that predicates "openness" as the core organizing principle for scientific practices. In order to make research results more accessible and transparent, platforms such as Research Gate and OpenAIRE could be used to submit scientific articles and disseminate project's results towards the scientific community.

4.4 Project website

IoTwins website (<u>www.iotwins.eu</u>) will be one of the dissemination tools. In particular, the **News and events** sections (the whole project website structure is described in the Deliverable 8.5 - Communication tools) will be used as an online tool to inform the audience concerning new achievements or dissemination events.

Also, IoTwins website has a section dedicated to **the project main goals and activities**, a space where all important reports concerning project achievements will be published.

This page can represent an agile tool to tell about the project when no leaflet or other paper material is available.

4.5 Twitter account

Project will have a Twitter account, @iotwins_EU. It will be managed by ART-ER - as WP8 leader - with contributions from all partners. Tweets will be used:

- As a hook to the project website
- To tell in real time about very important events
- To promote dissemination initiatives

Social media is an invaluable tool when it comes to connecting with people and staying updated on events, including conferences. Twitter represents an opportunity to interact with the conference's targeted audience.

GUIDELINES FOR USING TWITTER DURING EVENTS AND CONFERENCES:

- Follow the conference hashtag to see what people are talking about and to join the conversation.
 Partners can also use it to find out about sessions, social events, and anything else they may have missed.
- Inform people that IoTwins partners are attending by using the conference hashtag. This will give the opportunity to connect with people prior to the conference.



- Share photos, videos, and quotes from the conference. According to Twitters Media Blog, posts
 with photos get a 35% boost in retweets, videos get a 28% boost, and quotes get a 19% boost
 compared to regular tweets.
- Twitter is a very good channel for sharing experiences from the conference, but before posting anything, be clear on the policy of sharing information. Some speakers don't want their unpublished work to be tweeted or shared.
- Partners should use LinkedIn as well. After meeting new people at the conference, adding them on LinkedIn is a great way to connect and stay in touch. The function "Find Nearby" on LinkedIn is an easy way to connect with people at conferences.

4.6 Press and Media relations

All important achievements and project's milestones will also be announced through press releases during the lifetime of the project. In this period, press releases will include information on specific deliverable accomplishments, events, key results and important announcements. A press release can act as a hook to stimulate companies and researchers to go more in depth through the project activities, that means that also the press can be an effective dissemination tool.

Press releases will be sent not only to common media, but also to specialized business, innovation and research themes magazines. It is important to inform media about the newsworthy events and results. Special attention should be directed towards raising media awareness of the project activities and results, engaging their interest in the subject. Press releases will also be published on the project website and promoted through project social media accounts. Press releases should always include a link to the project website.

4.7 Events

The term "event" refers to private or public events, scientific conferences and congresses, meetings, technical workshops, open days, political level events, events organized by the European Commission or its Directorates, trade fairs and exhibitions.

Events represent an effective channel of communication and dissemination, since the possibility to meet in person with the targeted audience allows for a more proper presentation and explanation of project results, and to go more in-depth on details. They can be the perfect place to arrange one-to-one meetings with other attendants or speakers, or to open up to new networks that are relevant for project activities. Preparing a 30-seconds speech on the object of project's activities can be a good way to introduce themselves during this kind of initiatives.

When talking about events, it should always be considered that their lifetime also include an amount of time **before** and one **after**.

Before an event, whether a technical workshop or a scientific conference, a promotion activity should be started: partners should work on selecting the proper audience, the message to be conveyed, the timing for sending invitations, and all other activities needed for the specific case, according with WP8 coordinator and Outreach team.

After the event, some follow-up actions should be undertaken, so as to keep the audience attention alive and to schedule any further contacts or meeting with people who showed interest in the project's activities.



Events can be both public and private, and can be organized by:

- IoTwins Consortium
- Single IoTwins partners
- Third parties

There can be different levels of participation. A full description is included in D8.4- Communication Plan (I) in the related Events section .

In case of Scientific Conferences or other types of events, partners will evaluate on a case-by-case basis the actions to be put in place to participate; it can be a speech during a panel session, a poster: these depends on the goals to attain.

4.7.1 Dissemination events kit

TOOL	TO BE USED DURING
Project logo + EU flag	Fairs/exhibition catalogues
	Website pages and other events' promotion materials
Project presentation official template	Speeches
	Meetings
Project rollup	Workshops and other events
	Video-interviews
Project leaflet	Workshops and other events
Project poster	Workshops and other events
	Video-interviews
Project videos	Workshops and other events
Project Twitter account	Events

All these materials are available at OUTREACH TEAM SHARED FOLDER (<u>LINK</u>). This folder will be included in the EMDESK common repository as soon as it will be available.

4.7.2 Company guided tours and technical workshops

IoTwins can count on a rich consortium composed by renowned and important manufacturing industries, companies in the service and ICT sectors, excellent research centres, universities, and large data centres highly visible in big data research.

This represents a great chance to reach a specific audience and disseminate research achievements in a particular way, as it is actually a strong communication and marketing factor.

Guided tours to the companies and research centre sites will be completed by demonstrations of the specific testbeds. Technical workshops will also be organized and delivered by IoTwins partners in charge of the vertical development of project's distributed digital twins.

One Open Day event per each company that implemented an industrial test-bed will be organized. That means that BRI, FCB, CINECA, ETXE, GCL, SAGOE, FILL, CETIM and BSC will be directly involved.

3 Technical workshops will be organized by UNIBO, FOKUS and ESI. The workshop of ESI will be organized with the support of BEWG. These events are addressed to ICT SMEs, highlighting the possibility for SMEs to open up new opportunities for the creation of new intelligent services based on IoTwins distributed digital twins and platform.



ART-ER will provide the guidelines for activities; each partner will be responsible for the local organization. The events will also be supported by the communication material developed in the project, with specific press release.

4.7.3 Conferences and workshops

Participation to relevant conferences will be proposed by partners. Here following a list of relevant international conferences of interest for IoTwins:

CONFERENCE	PLACE AND DATE	DESCRIPTION	WEBSITE	REF. PARTNER
ML4CPS - Machine Learning for Cyber Physical Systems and Industry 4.0	Berlin, 12- 13 March 2020	The event will be dedicated to the topics of machine learning, industrial analytics and the use of machine learning (ML) in production.	https://www.ios b.fraunhofer.de /servlet/is/5115 2/	ETXE
Hannover Messe, fair on Industry 4.0	20-24 April 2020, Hannover	HANNOVER MESSE is the most important international platform and hot spot for industrial transformation - with excellent innovations or unusual products.	http://www.han novermesse.de	ETXE
IDTechEx	Berlin, 13- 14 May 2020	The IDTechEx Show! presents the latest emerging technologies at one event, with nine concurrent technologies and a single exhibition covering 3D printing, electric vehicles, energy harvesting, energy storage, graphene, internet of things, off grid energy independence, printed electronics, sensors & wearable technology.	https://www.idt echex.com/euro pe2018/show/e n/	
IoT World yearly congress	London, 10-11 June 2020	Part of the IoT World Series, the event focuses on providing attendees with the knowledge needed to activate the IoT opportunity and execute IoT enabled transformation. Acting as a global meeting point for 2,000+ enterprises and vendors, IoT World Europe is the go-to event for business leaders to discover investment priorities and implementation strategies.	http://www.iots worldcongress.c om	BSC



			111.	IOIWIIIS
NAMRC - North American Manufacturing Research Conference	June 22-26, 2020, Cincinnati	SME's North American Manufacturing Research Conference (NAMRC) is recognized as North America's preeminent and longest-running international forum for applied research and industrial applications in manufacturing and design with its presentations and publication of original, basic and applied research in advanced manufacturing. An annual event since 1973, NAMRC advances the scientific foundation of discrete-parts manufacturing leading to next-generation applications of emerging and innovative technology in material removal, forming and additive manufacturing processes and machines, and cyber-physical systems. The conference attracts global academicians, government and industry researchers, engineers, students and leaders in manufacturing to interact with each other and advance the field. NAMRC features peer-reviewed papers, keynotes, special opportunities for networking and collaboration, and recognition of research implementation, service and achievements.	http://www.sm e.org/namrc/	ETXE
Smart Manufacturing Summit	Indianapoli s, 2-4 June 2020	The Only Event for Mid-Market Manufacturers	www.smartman ufacturingsumm it.com	
Supercomputin g conference	21-25 June, Frankfurt	The ISC Exhibition, consisting of over 160 exhibitors, caters to the hardware and software demands of global research centers and businesses in the fields of HPC, artificial intelligence, machine learning and data analytics.	https://www.isc -hpc.com	BSC, CINECA
IMTS, International Manufacturing Technology Show	14-19 Sept. 2020, Chicago	IMTS 2020 will be the 33rd edition of the Premier Manufacturing Technology show in North America. Industry professionals from all over the world visit IMTS to see and experience more than 15,000 new machine tools, controls, computers, software, components, systems and processes that will solve their manufacturing challenges and improve their efficiency.	https://www.im ts.com/	ETXE



				101111111111111111111111111111111111111
R2B - Research to Business	June 11-12, 2020 Bologna, Italy Fair District - Hall 33	15th edition of the annual International Exhibition on Industrial Research and Skills for Innovation, organized by Emilia-Romagna Region in collaboration with ART-ER. Main Focus of #R2B2020 will be Human Centred Innovation and a Conference on "Big data for Civic Engagement"	https://www.rd ueb.it/	ART-ER
III International Triple Helix Summit	Bologna, 24-26 November 2020	The 2020 Summit will focus on the theme "Designing globally connected regional innovation ecosystems: overcoming barriers and opening pathways". New models of cooperation among Government, Industry and Academia steering the opportunities and reducing the hurdles in the right direction for our society at large.	https://www.tri plehelixassociati on.org/news/bo logna-will-host- the-iii- international- triple-helix- summit-on-24- 26-november- 2020	ART-ER
High energy physics community conferences, e.g. CHEP HEPIX conference series		The HEPiX forum brings together worldwide Information Technology staff, including system administrators, system engineers, and managers from the High Energy Physics and Nuclear Physics laboratories and institutes, to foster a learning and sharing experience between sites facing scientific computing and data challenges. Participating sites include BNL, CERN, DESY, FNAL, IHEP, IN2P3, INFN, JLAB, Nikhef, RAL, SLAC, TRIUMF and many others. The HEPiX organization was formed in 1991, and its semi-annual meetings are an excellent source of information and sharing for IT experts in scientific computing.	https://www.he pix.org/#	
Big data value association forum, 2		The Big Data Value Association (BDVA) is an industry-driven international not–forprofit organisation with 200 members all over Europe and a well-balanced composition of large, small, and mediumsized industries as well as research and user organizations. BDVA is the private counterpart to the EU Commission to implement the Big Data Value PPP program. BDVA and the Big Data Value PPP pursue a common shared vision of positioning Europe as the world leader in the creation of Big Data Value.	http://www.bdv a.eu/?q=node/7 4	BSC, CINECA



EOSC -hub -Services for the European Open Science Cloud EOSC-hub brings together multiple service providers to create the Hub: a single contact point for European researchers and innovators to discover, access, use and reuse a broad spectrum of resources for advanced data-driven research.

https://www.eo sc-hub.eu/ CINECA

For researchers, this will mean a broader access to services supporting their scientific discovery and collaboration across disciplinary and geographical boundaries.

The project mobilises providers from the EGI Federation, EUDAT CDI, INDIGO-DataCloud and other major European research infrastructures to deliver a common catalogue of research data, services and software for research.

EOSC-hub collaborates closely with eInfraCentral, EOSCpilot, GÉANT 4.2, OpenAIRE-Advance and the RDA Europe 4.0 projects to deliver a consistent service offer for research communities across Europe.

EOSC-hub is funded by the European Union's Horizon 2020 research and innovation programme under grant agreement 777536. The generous EU funding received by the project is complemented with a contribution from the EGI Foundation and its participants, and in-kind contributions made available by service providers of the EGI Federation.



		•	101441113
European social simulation association events	The European Social Simulation Association (ESSA) promotes the development of social simulation research, education and application in Europe. Founded on a manifesto signed by many social simulation researchers in 1993, the basis of the ESSA's Constitution was formed. ESSA has become the most important hub of social simulation worldwide. By collaborating with CSSSA, the Computational Social Science Society of the Americas, and PAAA, the Pacific Asian Association for Agent-based Approach in Economic & Social Complex Systems, ESSA has promoted international initiatives to build a bridge between regional groups and associations.	http://www.ess a.eu.org/events /	BSC
Sports technology symposium	regional groups and associations.	https://www.fc barcelona.com/ club/sports- technology- symposium	BSC, FCB
CAE conference (digital twins)	This annual conference focuses on the business and technology issues in the Simulation-based Engineering Sciences (SBES) arena and draws delegates from worldwide industry sectors, ranging from aerospace and oil and gas to civil engineering, manufacturing, and automotive. An innovation this year was the launch of an independent exhibition associated to the conference and focusing on all the technologies, service providers and applications that are interconnected with the digital transformation of businesses as they move towards Industry 4.0.	http://www.cae conference.com	CINECA
EMO metalworking fair	EMO Hannover is one of the world's premier trade fair for the metalworking industry. It is a key showcase for innovations and an essential driver of global production technology.	http://www.em o- hannover.de/ho me	ETXE



		_, _,		
Complex		The purpose of the Society is to promote	https://cssociet	BSC
systems society		the development of all aspects of	<u>y.org/events</u>	
events		complex systems science in the countries		
		of Europe, as well as the whole		
		international scientific community. See		
		CSS Statutes and CSS By-Laws.		
		The Society aims to promote complex		
		systems research pure and applied (What		
		are Complex Systems?), assist and advise		
		on problems of complex systems		
		education, concern itself with the		
		broader relations of complex systems to		
		society, foster the interaction between		
		complex systems scientists of different		
		countries, establish a sense of identity		
		amongst complexity scientists, and		
		represent the complexity community at		
		all international levels.		
		It is regulated by a CSS Council and by a		
		CSS Executive Committee.		
		The Society was first launched at a		
		European level on 7th Dec 2004 during		
		The European Conference on Complex		
		Systems at Foundation ISI in Torino, Italy.		
		It became an international society in		
		2006 during the ECCS06 Conference in		
		Oxford.		
		Since 2004, the Conference on Complex		
		Systems organized by the CSS, is the most		
		important annual meeting for the		
		complex systems research community.		
Mobile world	Barcelona,	The GSMA MWC series (formally known	https://www.m	BSC
yearly congress	2021	as Mobile World Congress) is the world's	obileworldcongr	БЭС
, 50, 50		largest exhibition for the mobile industry,	ess.com	
		and incorporates a thought-leadership	233.00111	
		conference featuring prominent		
		executives representing global mobile		
		operators, device manufacturers,		
		technology providers, vendors, and		
		content owners.		
ICT 2020	Cologne, 1-	The event, co-organized by the European		ART-ER
.5. 2020	3	Commission and the German Presidency		AINT LIN
	December	of the Council of the European Union, will		
	2020	have the following elements:		
		a high-level conference on digital policies,		
		an exhibition of EU-funded research and		
		innovation projects in the field of ICT;		
		a series of networking activities and many		
		more.		



IoT Week	Dublin 1-5	IoTWeek is a one of a kind5 day	https://iotweek.
	June	conference where leaders from the	org/
		worlds of business, tech and science shed	
		light on the future of technology and its	
		impact on business and life.	

4.7.4 Trade Fairs and other Exhibitions

Project achievements, included final results, will be showcased during a selected International Exhibitions at the end of the project. The focus will be both on the **IoTwins platform and the 7 test-beds** from WP4 and WP5. Potentially addressed exhibitions are:

FAIR	PLACE AND DATE	DESCRIPTION	WEBSITE
Hannover Messe	Hannover , April 2022	The GSMA MWC series (formally known as Mobile World Congress) is the world's largest exhibition for the mobile industry, and incorporates a thought-leadership conference featuring prominent executives representing global mobile operators, device manufacturers, technology providers, vendors, and content owners.	http://www.hannovermess e.de
BIMU	Milan, Oct 2022	Metal cutting, metal forming and additive machines, robots, digital manufacturing and automation, enabling technologies, subcontracting	http://www.bimu.it
MECSPE	Parma, June 2022	MECSPE is the greatest event focused on innovations for the manufacturing industry	https://www.mecspe.com/ it/
R2B Research to Business	Bologna, June 2022	15th edition of the annual International Exhibition on Industrial Research and Skills for Innovation, organized by Emilia-Romagna Region in collaboration with ART-ER.	www.rdueb.it

Actual addressed exhibitions will be selected also taking into account the timing of project activities.

Participation to these events will be also **promoted via social media and the website**.

Also, participation to these kind of events can include hiring a booth or not, as an example project partners can be hosted within other organizations' or projects' booths, or even hiring a booth as organization and take that as an opportunity to disseminate project's results. Let's see how many situations can occur.

PROJECT BOOTH

Having a project booth implies:

- Having a proper graphical layout of the stand with:
 - o project logo clearly visible
 - o IoTWINS PROJECT as front head
- Including a brief project description in the official event catalogue together with project logo and EU funds contribution acknowledgement



- Distribute project leaflet and any other relevant informative materials
- Project rollup has to be exposed
- If a screen is available, show the project video

OTHER ORGANIZATIONS' OR INITIATIVES' SPACES INSIDE EXHIBITIONS OR TRADE FAIR

In such situations, partners should take care of exposing the project rollup or poster, that depends on what is allowed. Project leaflet should also be available, as well as a project description on the initiative catalogue. A short standard presentation of the project is also something to have.

WORKSHOP OR SPEECH DURING A WORKSHOP INSIDE A TRADE FAIR OR EXHIBITION

Partners can also decide or be invited to organize a workshop during the exhibition, or to give a speech during initiatives organized by third parties. Partners should make sure the right visibility is given to the project, as described in the general rules (see section 4.7 Events).