

Platform for rapid deployment of self-configuring and optimized predictive maintenance services



## DELIVERABLE

# D8.1 – Dissemination and Commination Plan



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## DELIVERABLE

# D8.1 – Dissemination and Commination Plan

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# **Executive Summary**

The present deliverable entitled "Dissemination and Communication Plan" defines the main guidelines and means of the PROPHESY Communication and dissemination Strategy to be implemented in the course of the project. This strategy provides the framework within which the different awareness raising, promotion and engagement activities will be carried out.

The purpose of this deliverable is thereby to:

- Identify target audiences
- Present the strategy put in place for the dissemination and communication of knowledge and results.
- Define the rules and procedures that will be applied to implement, monitor and evaluate all the communication and engagement activities.
- Depict the methods, tools and promotional material (e.g. project logo, website, printable. dissemination material, events, publications) that will be used in the project's dissemination and communication.
- Provide a complete overview of the planned communication activities, as well as list other potential dissemination opportunities to be exploited in the project.

Via those means the PROPHESY consortium foresees to promote the concept and results of the project towards selected stakeholders and multipliers, as well as to outreach to the targeted entrepreneurs and start-ups so they enrol on the ideation and acceleration activities organised or promoted by the consortium.

The Communication plan constitutes an internal instrument that aims to provide a consistent framework for all activities needed to disseminate and sustain the concepts, achievements, as well as technical and knowledge results developed within the project. It will be constantly evaluated and revised in the course of the project duration.



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# 1 Introduction

## 1.1 Purpose and audience

The present deliverable is prepared in the context of Work Package 8 "Dissemination and Communication Activities" and is in particular associated with Task 8.1. WP8 is a horizontal component within the project work plan.

Its aim is to develop an overall dissemination and communication strategy for PROPHESY, taking into account the characteristics of the information that needs to be disseminated, the target audiences and groups and the impacts to achieve. The expected outcomes and impacts, assessment metrics and tools are defined. This strategy provides the framework within which the different awareness raising and promotion activities will be carried out in the course of the project.

In this context, Work Package 8 focuses on identifying the relevant stakeholders that have to be contacted in order to reach the right supporters at the right time, as well as on the preparation of the promotional material and organising dissemination activities to create an awareness on the PROPHESY concepts and solutions across the different communities of stakeholders.

The purpose of this deliverable is thus to outline an inclusive communication plan for the realisation of the above stated goals and in particular to:

- Identify **target audiences**, including among others Manufacturers, Machine Vendors, PdM Solution Providers, Reseachers, PdM Practitioners, EU projects, EU policy makers and PdM solution provisers.
- Present the **strategy** put in place for the dissemination and communication of knowledge and results.
- Define the **rules and procedures** that will be applied to implement, monitor and evaluate all the communication and engagement activities.
- Depict the **methods, tools and promotional material** (e.g. project logo, website, printable dissemination material, events, publications) that will be used in the project's dissemination and communication.
- Provide a complete **overview of the planned communication activities**, as well as list other potential dissemination opportunities to be exploited in the project.

This is a living document, able to accommodate any required customisation. The dissemination planning will thus be constantly evaluated and revised in the course of the project. Major updates will be included in the Periodic Reports.



### 1.2 Document structure

The Sections of the deliverable at hand are organised in the following manner.

After the introductory Section 1, Section 2 depicts the vision and the Unique Selling Points (USPs) of the PROPHESY dissemination.

Section 3 provides a detailed description of the communication strategy that PROPHESY will adopt in order to achieve the desirable communication results.

Section 4 presents the various types of dissemination activities and tools that will be used in order to support the project's dissemination and communication activities.

Section 5 presents a detailed Communication Activities' Plan.

Section 6 depicts the metrics for the evaluation of the dissemination and communication activities.

Section 7 concludes the document.



# 2 Fundamentals

#### 2.1 Vision

The vision of PROPHESY project is to act as a catalyst for the wider deployment and uptake of next generation, optimal, adaptive and self-configurable PdM services. More precisely, the main goal is to provide, validate and develop a viable route to market for a novel PdM platform, which will enable end-to-end development, deployment and operationalization of adaptive self-configurable PdM services, based on the combination of leading edge CPS components (i.e. CPS architectures, data analytics algorithms for PdM, augmented reality) and novel business models.



The key areas of the PROPHESY concepts and the relevant advancements / implementations that the project contributes are detailed presented in the diagram below. These are the areas that define also the target audience and the special needs of communication and dissemination activities.



Figure 1: PROPHESY areas of implementation and advancement



# 2.2 Objectives and goals of dissemination and communication strategy

Defining **objectives and the goals of the communication strategy** is the first step. The overall objectives are:

- To ensure that the objectives of the project, the vision, the activities planned as well the results produced become extensively known with the most effective and clear way to the manufacturing world including scientific communities and other projects' initiatives
- To increase stakeholders' engagement and ownership to provide and support more innovative and advanced PdM solutions
- To ensure that the project focuses on the real needs of the relevant stakeholders in PdM, establishing and maintaining a live mechanism for dynamic interaction with the identified stakeholders
- To achieve high visibility within the scientific community
- To share knowledge, best practices and strategies among the stakeholders and lower the barriers towards smart manufacturing in the PdM domain
- To achieve a European-level dissemination and awareness raising by providing information on project content and results.
- To create and maintain the project website and appropriate communication channels and dissemination tools to all external related communities/activities.
- To participate in targeted events and organize further specific events for increased and effective liaisons, dissemination of information and engagement of key stakeholders.
- To strengthen and advance the exploitation opportunities through the engagement of the relevant stakeholder to the project activities and results

The main goals of this initial version of the Communication plan are to (i) raise awareness amongst the community at large, (ii) encourage engagement with the target audiences, (iii) stimulate dialogue in the community.

Dissemination and communication of PROPHESY activities and outcomes will lead to raised awareness of the topic of PdM and especially on the project implemented solutions among core communities and stakeholders in industrial and PdM business world, communities of direct users and experts, research and academic world, relevant research projects and Initiatieves and the general public.



## 2.3 Unique Selling Points

PROPHESY will deliver, validate and evaluate in operational conditions a PdM platform (**PROPHESY-PDM**), services which will alleviate several of the issues prevent manufacturers that from deploying PdM services, including the issues of data fragmentation, the lack of data interoperability and the limited deployment of advanced analytics, while at the same time enabling manufacturers to close the loop from PdM activities to production processes.

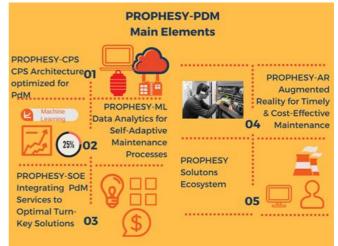


Figure 2: PROPHESY main service elements

The unique selling points of the project are at a great value matched with the **main elements** of the PDM platform, and the entire, **integrated platform** as well, as these are depicted in the diagram.

Further than the individual technical developments PROPHESY will be able to support also the following:

- **Turn-key PdM solutions for Industrie 4.0**: This service refers to turn-key solutions that will be offered through the PROPHESY-SOE. They are likely to include the PROPHESY technologies, including sensor data collection & integration technologies, data analytics technologies, or even remote support and maintenance technologies.
- **Remote support solutions based on advanced visualization and AR**: Such services will be developed and provided for specific equipment based on the PROPHESY-AR technology, through the PROPHESY-SOE platform.
- **Predictive data analytics services for manufacturers and machine vendors**: This service will be offered to manufacturers and/or PdM solution providers wishing to benefit from the innovative services of the PROPHESY-ML toolkit.
- Training and Support in the deployment and use of PROPHESY solutions: PROPHESY-SOE will provide training and support services to (potential) adopters of predictive maintenance technologies. To this end, the partners will develop and structure PdM training materials, including documentation linked to the PROPHESY results, as well as to other materials (tutorials, presentations, webinars) related to PdM in general. Moreover, more specialized training services will be offered based on the PROPHESY-AR and PROPHESY visualization technologies.
- **PHILIPS demonstrator**: PROPHESY will be implemented on one production line and one die set. When PROPHESY is functional for this production line it will be expanded to more production lines and more dies. Ultimately the whole factory can be equipped with a PdM





solution, but implementation needs to be done merit based. It will be highly profitable to implement PdM on high quantity / fast running products, but less interesting on small quantity, specialised products.

 JLR Demonstrator: PROPHESY's PdM platform will be applied to the machining processes of cubic metallic parts using multi-axis machining centres. There are more than 100 MAG machines currently in use within JLR's Engine Manufacturing Centre (EMC). PROPHESY's development will be focused on one machining operation within one production line (less than 12 machines). Beneficial products developed within PROPHESY can be immediately deployable and exploitable across the remaining machines (100+).





# **3** Communication strategy

## 3.1 Communication objectives

The main objective of the Communication activities will be to articulate the project's key achievements and main messages, with the aim to **create a strong awareness of the PROPHESY project** at the local and European levels. The activities will span communication to the general public as well as communication and dissemination to the professional stakeholders and users' groups.

In particular, PROPHESY communication strategy will aim:

- To create a clear internal project understanding of how the dissemination and communication activities listed in this deliverable can be used to support overall **PROPHESY project objectives**.
- To create a strong and recognizable **PROPHESY brand**, identity and key messages to be used on all dissemination material. Based on this, to prepare a professional toolkit consisting of the PROPHESY logo, templates for external communication and promotional material.
- To identify the **map of stakeholders** potentially interested in the project and its outcomes, engage them in the project's activities and encourage them to regularly interact with PROPHESY.
- To empower all partners to use PROPHESY appropriate **dissemination tactics** to easily convey the project purpose, aims and benefits to their own stakeholders and networks.
- To set up a robust **communication and dissemination support infrastructure** (i.e. visibility, social media), that will be continuously adapted in accordance with the changing requirements of events, target groups and communication channels.
- To recognise the **dissemination opportunities** in local and European & international events and conferences.
- To plan the production of **articles and scientific publications** to disseminate the project results within relevant events and in the internationally recognizable scientific journals.
- To build **partnerships through intensive networking** with existing related projects to share resource/data/results and spread good practice through the coordination/clustering activities.

Communication in the context of PROPHESY is designed as a forerunner activity to ensure knowledge diffusion and stakeholders' involvement, regarded as a two-way dynamic and interactive process, which should be continuous and progressive during the course of the project.

The success of dissemination activities strongly depends on the dissemination channels identified, used and/or established. PROPHESY will use a balanced mix of traditional (printed dissemination material, participation in local events, workshops and conferences, and



scientific publications) and online (Social Media, website-related) communication means that will be adjusted to each stakeholders' group and continuously adapted in accordance with the different phases of the project and the changing requirements. Finally, indirect dissemination will be accomplished via consortium partners' public relations, word of mouth, articles and assessment written by independent reviewers.

This dissemination plan will act as a handbook for every project partner in order to perform their dissemination activities, as it will list all stakeholders, communication channels, dissemination activities and corresponding key performance indicators.

## 3.2 Target audiences

Given the wide range of areas the PROPHESY project will have great impact on, different dissemination approaches will be followed paying attention to classifying these audiences as indicated below:

- Core communities / stakeholders in industrial and PdM business world:
  - **Manufacturers**, with interest in deploying and using novel predictive maintenance solutions based on PROPHESY technologies
  - Machine and Tool Vendors, with a clear interest towards offering advanced maintenance services to their customers, using technologies such as PROPHESY-ML for datasets associated with their machines, as well as PROPHESY-AR for remote support
  - **PdM solution providers**, with business activities focusing on the provision of turn-key PdM solutions to manufacturers or other stakeholders
  - **Providers of industrial automation solutions** for CPS manufacturing, which wish to expand their CPS offerings in the are of PdM
  - **Data analytics experts**, which will contribute the ever important data analytics techniques, based on novel approaches such as statistics and deep learning
  - **AR & support services'** providers that are interested in expanding their current tools
- Communities of users and experts
  - o EC clusters and associations
  - EC and National Manufacturing Initiatives
  - Industry4.0 Initiatives
  - EU Initiatives in IoT
  - Training Initiatives in manufacturing
- Policy making initiatives
  - EC and other decision/policy makers
- Research & academic community
- Relevant research projects and initiatives
- General public



#### Table 1: Project goals per audience groups

Audience / group	Project goals
Core communities / stakeholders in industrial and PdM business world	<ul> <li>Become aware of the solutions proposed by PROPHESY</li> <li>Engage with PROPHESY</li> <li>Establish partnerships with reference companies in the predictive maintenance sector</li> <li>Invite established business leaders to be mentors and coaches within the PROPHESY scope</li> <li>Scale-up the new business models validated by PROPHESY to the entire network</li> <li>Use the open source tools developed in PROPHESY</li> <li>Replicate PROPHESY solutions</li> <li>Facilitate access to new markets and users</li> </ul>
Communities of users and experts	<ul> <li>Become aware of the solutions in PROPHESY</li> <li>Engage with PROPHESY activities</li> <li>Strengthen the clustering opportunities in predictive maintenance area at EU ad international level</li> </ul>
Policy making initiatives	<ul> <li>Support predictive maintenance and relevant concepts in Industry4.0 to be at the top of the agendas</li> <li>Increase awareness of the project results, along with collaborative activities with the other projects under the FOF-09 Topic of the H2020-IND-CE-2016-17 call</li> </ul>
Research & academic community	• Exploit and further develop the knowledge and models developed in PROPHESY
Relevant research projects and initiatives	<ul> <li>Exploit and further develop the knowledge and solutions developed in PROPHESY</li> <li>Develop strong cooperation links to mutually benefit from the knowledge created</li> <li>Intensive cooperation in mutual dissemination in order to reach more relevant stakeholders</li> </ul>
General public	<ul> <li>Become aware of the solutions such as those proposed by PROPHESY</li> <li>Serve as a Multiplier: promote PROPHESY benefits to their audiences</li> </ul>

## 3.3 Targeted activities

The dissemination of the concepts and the results of PROPHESY will take several forms and use a variety of means and activities, intended for transferring the project's achievements, information and news, but also for engaging the targeted audiences in the project activities.



The main aim is to maximise the involvement of the identified audiences in order to let them closely follow PROPHESY's developments, provide their feedback and get engaged into the PROPHESY activities.

The dissemination means to be used in the project under each category of activities are as follows:

- Web-based dissemination
  - Project website
  - Social Media package
  - e-Newsletter
  - e-Publications (third portals' publications/blog posting activity)
- Events-based dissemination
  - Project specific workshops organisation
  - Conferences, workshops and local events participation
  - Event toolkit
- Print-based dissemination
  - Printed dissemination material (brochures, posters)
- Press-based dissemination
  - Press releases
- Scientific publications

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- Scientific papers and publications
- Liaising with other relevant projects and initiatives
  - Liaising with other RDI projects and initiatives addressing similar topics

A matrix of the dissemination mechanisms/activities used in PROPHESY, associated with the respective objectives and targeted groups, is presented in the following table.

Dissemination Objective mechanisms/activities		Targeted Timeline stakeholders		
Web-based disseminatio	n			
Project website	Information and knowledge diffusion Results presentation One-stop-shop for PROPHESY Ecosystem stakeholders	All stakeholders	Constantly	
Social Media package	Awareness creation Knowledge diffusion Results presentation	All stakeholders	Constantly	
e-Newsletter	Information and knowledge diffusion Results presentation	All stakeholders, especially project	Periodically based on project developments	

#### Table 2: Dissemination means associated with the respective objectives and targeted groups



Dissemination mechanisms/activities	Objective	Targeted stakeholders	Timeline				
		targeted stakeholders					
e-Publications	Awareness creation Knowledge diffusion Results presentation Collaboration	All stakeholders and targeted depending on the targeted/ used portal	Constantly, as appropriate				
Audio visual and multimedia	Awareness creation Information and knowledge diffusion Results presentation	General public All interested stakeholders	As appropriate				
Events-based disseminati	on	1					
Project specific workshops organisation	Consultation, brainstorming, discussion and validation of PROPHESY results and achievements	Relevant stakeholders of PROPHESY ecosystem	As appropriate according to the plan				
Conferences, workshops and local events participation	Awareness creation Engagement of users' groups and experts, as well as wider academic and experts' community Methodology presentation/validation Networking and collaboration with relevant stakeholders and other projects	Communities of users and experts, core community of PROPHESY ecosystem, Research world, other EU projects, general public	Continuously, based on the projects developments				
Event toolkit	Awareness creation and messages diffusion	ALL	As appropriate to make sure the material is always available for the events				
Print-based dissemination							
Printed dissemination material (brochures, posters, roll-up)	Awareness creation Knowledge diffusion Results presentation	Relevant stakeholders (as above), general public, all interested stakeholders	As appropriate, based on project developments and results				
Press-based disseminatio	n						



Dissemination mechanisms/activities	Objective	Targeted stakeholders	Timeline
Press releases	Awareness creation Media and other relevant "multipliers" engagement	All interested stakeholders	Periodically based on the project developments and results
Scientific publications			
Scientific papers and publications	Knowledge diffusion to the relevant scientific community Results presentation	Research and academic community Other research projects	As appropriate, based on project phases and results
Liaising with other releva	nt projects and initiatives		
Liaising with other RDI projects and initiatives addressing similar topics	Information and knowledge exchange Alignment of activities among the relevant projects Collaboration in dissemination activities Build and strengthen PROPHESY ecosystem	EC and other relevant projects and initiatives	Continuously, as appropriate

## 3.4 Exploring synergies

The key success factors for the dissemination of PROPHESY are both individual and institutional. For this reason, we need to rely on the diversity of actors, and a variety of networks. At this stage, the dissemination process of PROPHESY will attempt to bring to light **unexpected synergies**. Exploring synergies with other relevant RDI projects and initiatives addressing similar topics, but also other networks, users' organisations, committees, etc., which could provide a cost-efficient and future ensured manner to promote PROPHESY and disseminate it through alternative channels and services. Such synergies will provide long-term promotional and visibility solutions that are beneficial to all parties involved.

We will consider, among other things, collaboration and promotion actions through the following:

EFFRA – The European Factories of the Future Research Association <u>http://www.effra.eu/</u>

The European Factories of the Future Research Association (EFFRA) is a non-for-profit, industry-driven association promoting the development of new and innovative production technologies. It is the official representative of the private side in the 'Factories of the Future' public-private partnership.

FERA



The key objective of EFFRA is to promote pre-competitive research on production technologies within the <u>European Research Area</u> by engaging in a public-private partnership with the European Union called <u>'Factories of the Future'</u>.

The partnership aims to bring together private and public resources to create an industry-led programme in research and innovation with the aim of launching hundreds of marketoriented cross-border projects throughout the European Union. Such projects will produce demonstrators and models to be applied in a wide range of manufacturing sectors.

#### AIOTI - SPACE | The Alliance for the Internet of Things Innovation <u>https://aioti.eu/</u>

BDV BIG DATA VALUE ASSOCIATION

2025 INDUSTRIA

The Alliance for Internet of Things Innovation was initiated as a result of the European and global IoT technology and market developments. AIOTI aims to create and master sustainable innovative European IoT ecosystems in the global context to address the challenges of IoT technology and applications deployment including standardisation, interoperability and policy issues, in order to accelerate sustainable economic development and growth in the new emerging European and global digital markets.

The IoT European Research Cluster – European Research Cluster on the Internet of Things (IERC) played a major role in the preparation of the Alliance. The work started in 2014 followed by a high-level meeting on 4th February 2015 in Brussels in order to explore the creation of the Alliance for IoT Innovation.

PROPHESY will explore and initiate synergy especially with the "**WG 11: Smart Manufacturing**" working group. The topic for this Working Group refers to IoT solutions that bring together information, technology and human ingenuity to achieve a rapid revolution in the development and application of manufacturing intelligence to every aspect of business.

#### BDVA – Big Data Value Association

The Big Data Value Association AISBL (BDVA) is a fully self-financed non-for-profit organisation. The Big Data Value Association (BDVA) is the private counterpart to the EU Commission to implement the BDV PPP programme (Big Data Value PPP). BDVA has over 150 members all over Europe with a well-balanced composition of large and small and medium-sized industries as well as research organizations.

#### Industry 2025

http://www.industrie2025.ch/

http://www.bdva.eu/

«Industry 2025» is a national initiative, which Swissmem launched in mid-2015 together with three other associations. Its objective is to firmly embed the vision and concept of Industry 4.0 in Switzerland. And it is helping to implement the initiative efficiently and effectively in industry. It is achieving this objective via defined action areas and appropriate tools.



#### SPIRE2030

#### https://www.spire2030.eu



A.SPIRE is the European Association which is committed to manage and implement the SPIRE Public-Private Partnership. It represents innovative process industries, 20% of the total European manufacturing sector in employment and turnover, and more than 130 industrial and research process stakeholders from over a dozen countries spread throughout Europe. SPIRE brings together cement, ceramics, chemicals, engineering, minerals and ores, nonferrous metals, steel and water sectors, several being world-leading sectors operating from Europe.

The mission of A.SPIRE is to ensure the development of enabling technologies and best practices along all the stages of large scale existing value chain productions that will contribute to a resource efficient process industry.

FOF-09 Cluster – Novel design and predictive maintenance technologies for increased operating life of <u>http://prophesy.eu/node/65</u> production systems

This cluster is comprised by the EU funded projects implemented under the **FOF-09 Topic of the H2020-IND-CE-2016-17** Call and targets on the establishment of an extended community in PdM technologies and beyond PROPHESY. Along with PROPHESY, this cluster includes the following projects:

**SERENA** – VerSatilE plug-and-play platform enabling remote pREdictive mainteNAnce, <u>http://serena-project.eu/</u>

**UPTIME** – Unified Predictive Maintenance System, <a href="http://www.uptime-h2020.eu/">http://www.uptime-h2020.eu/</a>

**Z-BRE4K** – Strategies and Predictive Maintenance models wrapped around physical systems for Zero-unexpected-Breakdowns and increased operating life of Factories

**PROGRAMS** – PROGnostics based Reliability Analysis for Maintenance Scheduling, <u>https://www.programs-project.eu/</u>

**PRECOM** – Predictive Cognitive Maintenance Decision Support system, <u>https://lnu.se/en/research/search/forskningsprojekt/project-predictive-cognitive-</u> <u>maintenance-decision-support-system-precom/</u>

#### Other RID projects that PROPHESY will establish / explore synergies:

- **MANTIS** Cyber Physical System based Proactive Collaborative Maintenance (ECSEL-2014-1)
- **FAR-EDGE** Factory Automation Edge Computing Operating System Reference Implementation (H2020-FOF-2016)
- Productive4.0 Electronics and ICT as enabler for digital industry and optimized supply chain management covering the entire product lifecycle (H2020-ECSEL-2016-2-IA)





- **CREMA** Cloud-based Rapid Elastic MAnufacturing (H2020-FoF-2014)
- **Platforms4CPS** Creating the CPS Vision, Strategy, Technology Building Blocks and Supporting Ecosystem for Future CPS Platforms (H2020-ICT-2016-1)
- Boost 4.0 Big Data for Factories (Big Data Value PPP)

## 3.5 Dissemination approach

The PROPHESY dissemination approach is meant to be a **dynamic** and **flexible** enough process in order to be adjusted in accordance with the results of the feedback received from various information providers (consortium members, stakeholders involved, etc.) and taking into account the various opportunities. The consortium therefore will regularly review and update the communication strategy on the basis of the stakeholders' needs and requirements and according to the progress of the project, in order to focus on efficiently promoting the results of each phase.

The PROPHESY dissemination approach will be based on both the overall consortium vision and the individual partners' dissemination competencies. It will also ensure that the disseminating information and publications produced both by the project and separately by partners via various activities (web channels, printed material) are carefully reviewed and selected.

The dissemination approach adopted is also **measurable and traceable by employing quality indicators** for all services undertaken and tracking the progress of the dissemination activities.

The overall process followed towards development of a detailed communication strategy has been to:

- Identify the target audiences.
- Consider the specificities of the target audiences.
- Ensure that the specially calibrated per case message is clearly defined and addresses the needs of each target audience.
- Select/fine-tune the dissemination/communication activities.

The resulting dissemination and communication strategy will be implemented in two phases, based on the project's results:

1. Awareness raising: During the early stage of the project, with no solid results available yet, the project will follow a content related dissemination approach, employing various dissemination channels and material for communicating messages to the identified stakeholder groups. During this phase, the strategy will mostly focus on raising the awareness about the project as well as on engaging the potentially interested stakeholders in the project's activities. Firstly, informing the different target groups about the developments taking place in the project as well as concerning the topic itself is of highest priority. In addition to informing about the respective status of the project, it also includes making selected deliverables accessible, informing about exploitation plans, publicising events at which the project is represented and similar activities.



2. **Engagement**: The focus on the second phase will shift more to further building up and further establishing a reputation. It will follow a more result-oriented approach, with emphasis on the real outcomes of PROPHESY.

During the second phase, the project consortium will engage interested community members to "spread the word" via their respective channels about PROPHESY aims and results. Therefore, as also mentioned above, it is important for the communication team to detect existing communities around the relevant topics in order to:

- initiate discussions (e.g. in the Social Media, by visiting relevant events, etc.).
- o gather new insights that might help to improve the work done in the project.
- create a network of 'multipliers' that could help disseminate the PROPHESY ideas and outcomes.

Informing about the respective activities and developments, discussing them openly and sharing them is therefore also part of the communication strategy.

To make sure that no important information is lost after the PROPHESY project ends, we will keep the services and the project website ongoing for at least 2 years after the project end. The aim is that all public project information including public deliverables and reports will stay available.

#### 3.5.1 News and Information Bureau

The project News and Information Bureau is an integral part of the Communication Strategy. This action will be undertaken in cooperation with the communication team, who will be keeping the engaged networks informed through the dissemination of content to the website, newsletters, Social Media etc. and preparing press releases.

As such, we will devise **a content and social media strategy** to attract specific audiences with specific messages. The Information Bureau thus will among other things revise information and initiatives that are promoted and organised in the PROPHESY areas and will transfer contents to different channels in a proper way.



# 4 Means of dissemination

## 4.1 Project identity (visual and branding)

As an EC co-funded research and innovation project, a clear project brand identity needs to be implemented in order to have an impact with the dissemination of respective work and achievements.

The recognition and perception of a brand is highly influenced by its **visual presentation**. A project visual identity is the overall look of its communications. Effective visual brand identity is achieved by the consistent use of particular visual elements to create distinction, such as specific fonts, colours, and graphic elements.

A visual identity has been created since the early stage of the project, so as to secure a strong and unique brand. It will be incorporated in all promotional / dissemination material produced during the project and will be used by all project partners in their communication activities.

The identity is composed of visual elements such as the PROPHESY logo, fonts, colour palette and templates for documents and presentations. All dissemination materials refer to the project name, the project's website and the Horizon 2020 with associated graphic elements in line with the European Commission's guidelines<sup>1</sup>.

#### 4.1.1 PROPHESY Logo

The core of this visual identity is the logo. The logo is part of the project communication and branding; it provides a consistently unique and coherent **visibility and identity**, making PROPHESY stand out relative to similar projects.

The PROPHESY logo has been designed in the very early stages of the project with the aim of presenting the Project's concept and vision to external stakeholders.

The logo has been created according to an iterative design process taking into account the opinions of multiple stakeholders (project partners). Below we present a sketch board on which the design process of the logo is displayed. On these sketch boards we go from multiple, very diverse logo concepts to detailing one specific concept.

<sup>&</sup>lt;sup>1</sup> <u>http://ec.europa.eu/research/participants/data/ref/h2020/other/gm/h2020-guide-comm\_en.pdf</u>



D8.1 – Dissemination and Commination Plan Final – v6.0, 28/02/2018



Figure 3: PROPHESY Logo - initial sketch board, testing multiple concepts

After numerous discussions and modification rounds, weighing up pros and cons, the consortium decided on the PROPHESY logo to be the following one:





#### Figure 4: PROPHESY logo in two variations (colour and black & white)

It is characterised by smart, simple and intuitive design that includes both the project acronym and the full project name. It provides an **easily recognisable project trademark** to be used in all dissemination material and activities to contribute in creating awareness and promotion.

Along with the logo a number of other images were also selected to support the establishment and visual enrichment of social media pages and the production of project documents' templates:







#### Figure 5: PROPHESY images for visual enrichment

#### 4.1.2 EU flag

The EU flag along with the declaration that "This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 766994" will be used by PROPHESY in all its communication material and the website.



#### Figure 6: EU flag and the message

#### 4.1.3 PROPHESY PowerPoint template

The PowerPoint presentation template has been created in order to be used by the partners to create their presentations for all external and internal events, meetings, etc., based on a common look and feel. The template has been designed by INTRA and validated by the project coordinator. The PROPHESY presentations template is presented in the Annex I.





Figure 7: PROPHESY PowerPoint template

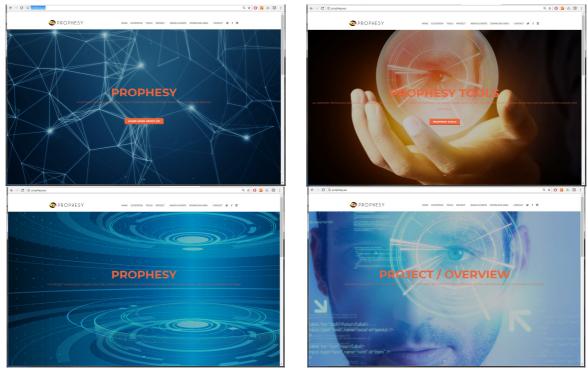
## 4.2 Web-based dissemination

#### 4.2.1 Project website

According to the project's Grant Agreement Annex 1 (Part A), PROPHESY website (together with the project's templates for promotion products) is planned to be online on Month 6. However, the consortium believes that it is crucial to have the online presence from the very first months of the project and thus decided to create a landing page introducing PROPHESY until the final project website is functional and online.

The **project website's home page** is accessible at <u>www.prophesy.eu</u>, includes the PROPHESY logo, the EU flag with the respective message, a short project description and a contact form. Messages sent via the contact form are forwarded to <u>info@prophesy.eu</u> which is forwarded to the concerned project partners (the coordinator, and the WP8 leader, INTRA), who will receive the message and respond to it. In addition to this, for dissemination purposes also a gmail account for PROPHESY has been created that also receives the e-mails from the project website, with the name <u>prophesy.eu@gmail.com</u>. This address has been used also for the creation of the social media accounts and the relevant material that need to be shared among the partners.





*Figure 8: PROPHESY online presence – home page messages* 

The PROPHESY **fully functional website** will be the main communication tool for the dissemination and communication of information related to the project. The PROPHESY website will become a single gateway to access available results for people seeking information.

The website incorporates basic project **information**, key results, news items, event alerts, and it will also offer **added-value services** such as publications, newsletter, as well as signpost to related news, events and projects.

The main sections of the project website include the following:

- **Home**: Intro page that presents using a slideshow the main concept and message of the project
- **Ecosystem**: PROPHESY Ecosystem focuses on the development, deployment and operationalization of dynamic, self-adaptive and cost-effective (turn-key) PdM solutions. This page will be the entrance point to the relevant ecosystem. As starting point, the introduction to the FOF-09 Cluster has been developed, that includes all the EU funded projects implemented under the FOF-09 Topic of the H2020-IND-CE-2016-17 Call.
- **Tools**: This section presents the integrated PROPHESY technological solution and relevant updates will be provided as well according to the future implementations.
- **Project**: This part of the website provides an Overview of the project concept and objectives along the Partners
- News & events: This part will announce all the project news and events based on the workplan



- **Download area**: This area will provide all dissemination, promotion and communication material that are available to the public, including Media, Outcomes (public deliverables), Published (research) papers
- **Contact**: This includes the form and contact points for the visitors to communicate with the dissemination and Coordination team of the project
- **Social media pages**: This information is placed at the top and bottom of all pages allows access to the <u>Facebook</u>, <u>Twitter</u> and <u>LinkedIn</u> pages of the project
- Newsletter subscription area

The website is based on a **Content Management System (CMS)** allowing easy way of creation and management of the website content, including news, events and other relevant articles and their relevant images.

INTRA as a Communication Leader will keep the authority to upload content, mainly for the sake of consistency and editorial quality. All partners will contribute in drafting content, according to their role in the project and knowledge.

The site will be set up and maintained during the project implementation and at least two years after PROPHESY completion.

#### 4.2.2 Social Media package

Various social networks will be used as **marketing tool** in order to promote on a regular basis activities and outputs of the project, while also encouraging a wider discussion on the topics related to PROPHESY activities.

Thus, PROPHESY will have an active presence in the most popular social media, such as **Twitter**, **Facebook** and **LinkedIn**, which are linked to the project's website and the prophesy google account.

Below we present a brief overview of the Social Media channels created for PROPHESY.

Twitter (https://twitter.com/ProphesyProject)

As a rapid and professional communication tool, Twitter allows real-time interactions and very high potential outreach towards PROPHESY's target audience, using hashtags and thematic tweets.

PROPHESY already has an active Twitter account (@<u>ProphesyProject</u>) and has chosen the hashtag #ProphesyProject for its tweets. The twitter account will be used for promoting and disseminating the PROPHESY developments, news, events, outcomes, etc. Moreover, retweets are made of relevant and interesting content from disparate sources. Last but not least, through targeted following of other relevant users PROPHESY not only gets access to more relevant content and updates, but also acquires more followers.

As a Horizon2020 project, PROPHESY follows the official Twitter account for the Horizon 2020 programme @EU\_H2020 thus becoming a part of the community of H2020 projects on social



media. Following the guidelines received from the EC<sup>2</sup>, we pursue to use a hashtag #ResearchImpactEU and tag @EU\_H2020 whenever announcing important news which clearly shows the real impact of our research.

Also, in order to be added to Horizon2020 new Twitter list and thus making it possible to inform the EC (Horizon2020 account) about our activities we introduced our project via twitter with a tag @EUJH2020, following the abovementioned EC guidelines.



Figure 9: PROPHESY Twitter account

#### Facebook (https://www.facebook.com/ProphesyProject/)

PROPHESY maintains a Facebook fan page, in order to be reachable by a broader and probably less specialised audience. The project's Facebook page will include news, photos and information about the PROPHESY project, its developments and activities. We also pursue to re-post relevant and interesting information from other accounts in order to enrich the page content and attract more fans.

<sup>&</sup>lt;sup>2</sup> EC communication sent on 23/02/2017 by the Participant Portal Grant Management Service on behalf of Mr Robert-Jan Smits, Director-General at Research and Innovation Directorate-General of the European Commission, titled "Information letter on Horizon 2020 project communication and acknowledgement of EU funding"





#### Figure 10: PROPHESY Facebook page

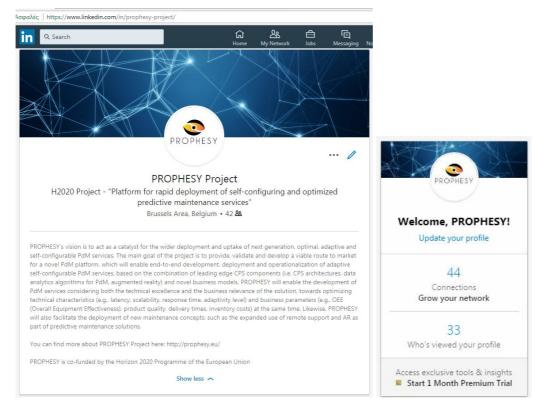
Both Twitter and Facebook page are connected to diffuse PROPHESY news, key messages and announcements to the wider audience of related stakeholders.

#### LinkedIn (https://www.linkedin.com/in/prophesy-project/)

LinkedIn is a business-oriented professional networking tool that is used by many as a source of information and inspiration, therefore a solid presence to amplify the news on the website is necessary. It therefore constitutes an important platform for discussions, relevant to PROPHESY, among experts in the area and various stakeholders in general.

PROPHESY maintains a LinkedIn profile page, making it possible to connect to very relevant professionals and diffuse to them our main news and developments. On the other hand, it gives the possibility to subscribe and post on the relevant major groups relevant to the fields of the project.





#### Figure 11: PROPHESY LinkedIn page

#### 4.2.3 e-Newsletter

An e-Newsletter will be produced by the PROPHESY consortium on a periodic base (every six months, in total 6 newsletters) and will provide regular updates on what is happening on the project, highlighting its major achievements. The newsletters will also contain information regarding the upcoming tasks and events in an attempt to inform the audiences on how they can get in touch with the project. As such, a typical e-Newsletter of the project will contain project highlights (major outcomes, links, contacts, and dissemination activities), the most important news, announcements and a schedule of the major upcoming events. Project partners will provide information for the e-Newsletter and ensure that the content is accurate.

All the e-Newsletter issues will be uploaded on the project website.

A mailing list will be created giving the possibility to share the e-Newsletter via mass mailing as well to inform interested users about project news, achievements and planning of events. A registration functionality allowing the interested visitors to subscribe to the newsletter will be included. Moreover, a contact list including PROPHESY external contacts interested or potentially interested in the project activities and achievements will also be created in a specific Google Drive shared sheet. All the partners will be requested to complete the list with their relevant contacts and regularly update the list with new contacts (e.g. collected during the events, conferences, workshops, etc.).



#### 4.2.4 e-Publications

Significant project developments, news and announcements, press releases, but also articles introducing PROPHESY will be also published on third parties portals, including the professional specialised platforms, Cordis, relevant thematic blogs/collaboration platforms,<sup>3</sup> partners' web portals, as well as through several freely accessible tools.

A preliminary list of the freely accessible portals includes:

- Cordis Projects & results: <u>http://cordis.europa.eu/projects/home\_en.html</u>
- TRIMIS: <u>https://trimis.ec.europa.eu/</u>
- ELTIS: <u>http://www.eltis.org/</u>
- Horizon Magazine <u>http://horizon-</u> magazine.eu/https://ec.europa.eu/programmes/horizon2020/en/newsroom/55 1/
- research\*eu results magazine <u>http://cordis.europa.eu/research-eu/home\_en.html</u>
- Headlines on the Commission's Research & Innovation website www.ec.europa.eu/research/infocentre/all headlines en.cfm
- CORDIS Wire <u>http://cordis.europa.eu/wire/</u>

To strengthen the dissemination the Project will produce **white papers** focused on the project's integrated PdM solutions, as well as on the benefits of individual technologies, platforms and demonstrators developed in PROPHESY. Three white will be produced during M12, M24 and M33.

#### 4.2.5 Visuals and multimedia

Infographics condense and present complex information in a visual representation that guides the readers. They can vary from 'full page' images to small images suitable for a Facebook post, focusing on one key message and making them easier for users to share.

PROPHESY will create at least two infographics depicting the project's aims (during the first year of the project) and results (during the more advanced project's phase when strong results are already available).

The infographics aim at conveying information quickly and easily to the wide public. The infographics will be uploaded on the project's website, disseminated via the Social Media and placed on the dissemination material (e.g. the project poster). The project infographics may also be used by the partners in the project presentations.

Apart from Infographics the project will also implement and disseminate videos for the PROPHESY success stories.

#### 4.3 Events-based dissemination

Awareness-raising regarding PROPHESY is expected to be impacted positively by the project representation in relevant events. Events are an important means for PROPHESY to

<sup>&</sup>lt;sup>3</sup> E.g. relevant CIVITAS Thematic Groups (<u>www.civitas.eu/thematic-groups</u>)



communicate and disseminate the aims, developments and results of its work. Events are often the only way of interesting mainstream press in EU affairs, to ensure a Press Release and organise interview opportunities with high-profile participants.

As the per project specifications, we expect to be involved in a variety of event formats, ranging from local events, events organized by the collaborating EU projects, to **EU and International conferences and workshops**, and to take on all tasks related to event planning and implementation and supporting the project with communication material (brochures, poster).

#### 4.3.1 Participation in events

We will represent PROPHESY at a number of events aiming to promote and communicate, by all relevant means and tools, all relevant information that will increase the project visibility. Participation in events is also an opportunity to increase and strengthen the network of relevant parties interested in becoming target audiences and intermediaries becoming multipliers of PROPHESY.

PROPHESY representation in the events can take place in different ways, including paper or project presentation, poster presentation, simple participation for liaising or networking purposes. Project promotional material such as brochures and a poster or a roll-up (where relevant) will be also used for dissemination purposes.

A specific Google Drive shared sheet template listing the events potential for partners / confirmed participation has been created in order for the project consortium to be able to keep track on the partners' participation and to report about these activities and their impact in the dissemination deliverables as well as on the project website. The Google Drive sheet is available <u>here</u>.

	Α	В	С	D	E	F	G	н	I.
1					Listo	of dissemination	activities		
2	по.	Type of activities	Main leader	Title	Date	Place	Type of audience	Size of audience	Countries addressed
3	1								
4	2								
5	3								
6	4								
7	5								
8	6								

# *Figure 12: Google Drive sheet listing the events for potential/confirmed PROPHESY representation*

An indicative (yet non-exhaustive) list of relevant events, which are considered as useful for a large dissemination throughout the first year of the project and beyond, is presented below. These events, to be selected and prioritised during the project, are proposed as an indication of the types of events being held mainly throughout the EU in 2018 that PROPHESY will consider participating.

The list will be regularly updated in the Google Drive shared sheet and the events prioritised during the whole project duration.



Location	Date	Title / description
Athens, Greece	Feb. 2018	H2020 FAR-EDGE - Stakeholders' Workshop
Brussels, Belgium	Feb.2018	EFFRA Workshop at EU Industry Day 2018
Stuttgart, Germany	Jun. 2018	International Conference on Engineering, Technology & Innovation
Villepinte, France	Mar. 2018	Digitising European Industry Stakeholder Forum 2018
Berlin, Germany	Mar. 2018	IESA 2018 – Smart Services and Business Impact of Enterprise Interoperability
Germany	Apr. 2018	HANNOVER MESSE
Brussels, Belgium	Feb. 2018	Multi-Material Manufacturing: Industrial Approaches & Solutions Workshop
Brussels, Belgium	Feb. 2018	Factories of the Future for the Automotive Sector
Brussels, Belgium	Feb. 2018	EIT Information Day
Ghaziabad, Norway	Aug. 2018	2018 2nd International Conference on Data and Information Sciences (ICDISs)
Bergano, Italy	Jun. 2018	2018 16th IFAC Symposium on Information Control Problems in Manufacturing (INCOM)
Moscow, Russia	May 2018	2018 International Conference on Industrial Engineering, Applications and Manufacturing (ICIEAM)
Madrid, Spain	Sep. 2018	2018 IEEE International Conference on Software Maintenance and Evolution (ICSME)
Munich, Germ	Feb 2018	CESIS 2018 – Global Internet of Things
Manchester, UK	Feb 2018	INDUSTRY 4.0 SUMMIT
Amsterdam, The Netherlands	Jun 2018	ADDITIVE MANUFACTURING EUROPE 2018
Messe Stuttgart, Germany	Nov 2018	VISION - WORLD'S LEADING TRADE FAIR FOR MACHINE VISION
Amsterdam, The Netherlands	Feb. 2019	21st International Conference on Industrial Technology

#### Table 3: Relevant events considered for large dissemination in PROPHESY

It should also be noted that the consortium plans to concentrate more efforts for the events participation towards the end of the project when considerable results are available to be disseminated in the events.



Beyond the events mentioned above, the Consortium plans also to participate in a number of prominent exhibitions on PdM products and services in order to promote the PROPHESY technologies and tools, including the services of the PROPHESY joint exploitation strategy. Such exhibitions are listed below:

#### Table 4: Relevant events considered for large dissemination in PROPHESY

Title / description	Date	Webpage
2019 AFPM Reliability &		
Maintenance Conference And		
Exhibition - American Fuel &		
Petrochemical Manufacturers	Feb. 2018	http://www.afpm.org/
EMO Hannover 2019	Sep. 2019	http://www.emo-hannover.de/home
MCMCongress and Exhibition on		https://www.expocheck.com/en/expos/71381-
Maintenance Solutions, Milan		mcm-congress-and-exhibition-on-
(Italy)	Ap. 2018	maintenance-solutions-milan-italy

The level of involvement in the events will vary, according to the nature and interest of the event. A thorough procedure for deciding on our participation on dissemination activities will be followed, to identify those events which are "tailored" to promote our dissemination goals with each specific group within our target audience: we collect information on the events, we assess and prioritise and we decide whether or not to participate and how to participate.

The final list of events/and conferences will be discussed in terms of cost efficiency, input to the promotion and awareness strategy and will be updated according to new needs and developments. Overall, the communication objectives and target audiences together with budget and the personnel availability are the reference for the decisions on the events. When the decision for participation is taken, we will also identify who is responsible for the implementation / organisation issues involved.

After every participated event, the concerned PROPHESY partner is requested to update the events Google Drive shared sheet (presented earlier) with all the relevant information to capture the experience.

#### 4.3.2 Events organisation

PROPHESY will organize its own workshops and conference-sections in the context of participation and in collaboration with Organizations and Projects that are in synergies. Mostly, it is expected that these events will be co-organized with the Projects that participate in FoF-09 Cluster.

More precisely, PROPHESY will organize three (3) workshops with the participation of all stakeholders associated with the project's results, including edge computing services providers, industrial automation solution providers, smart city solution integrators,



researchers, policy makers, standardization bodies' representatives and more. These workshops will be organized in the context of the following Task:

- Task 7.5 Stakeholders' Feedback and Evaluation (JLR), focusing on the evaluation of the demonstrators from the stakeholders' viewpoints (M33 M36).
- Task 8.3 Clustering and Standardization Activities (ICARE), focusing on the engagement of standardization bodies and EU clusters and associations to the project and the communication of project results in these initiatives and bodies (M22 M24)
- Task 8.5 Community and Ecosystem Building (INTRA), focusing on engaging stakeholders in the project's ecosystem (M13 M15)

in addition to these, PROPHESY Consortium will organize also **two Open days** with live demonstration of PROPHESY Technology in the pilot sites where the project's results will be demonstrated to interested parties. These Open Dayes will be organized under the Task 8.1 Dissemination and Communication Activities, by **PHILIPS and MAG the last three months** of the project.

### 4.3.3 Event toolkit

An Event toolkit can be used for both own and third-party events. The key here is to make as many "dual use" products as possible – communications tools which can be used at events and via other channels (e.g. Multipliers).

The Event toolkit will include: roll-up, posters, brochures (a lighter and a more results oriented version is foreseen) and identification material.

### **Roll-up and posters**

Roll-up versions will be created, to match the look and feel of the website and the overall project design concept to meet the needs of the project.

Posters of a smaller size (A0) will be produced. PROPHESY will also consider producing event focused posters of smaller size, if considered necessary, where the content of the poster will be replaced to fit the needs (theme) of the event.

Both roll-up and posters will be prepared in English language (local languages to be considered as appropriate) to raise the awareness of the stakeholders and a variety of audiences about the project with succinct textual and graphical information.

The project logo, the EU flag along with the declaration that "This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 766994", the PROPHESY website, the social media links and the project partners will be clearly displayed on the poster.

Work for the design of the project roll-up/poster templates will start on Month 5. The templates of both will be available on Month 6 and will be uploaded on the PROPHESY website. Printable versions of posters will also be created and provided to partners so that could print it and use at the events they participate in.



The design will be easily adjustable to the requirements individual partners have, in case additional, more specific versions are required.

#### **Identification material**

We plan to produce targeted gadgets showing the project logo or a small slogan. We will design, layout and print/produce the full set of materials typically required for professional events. Potential identification material can one include one type or the selection from: notepads, pens, USB sticks, bags, etc.

The consortium will analyse the possibilities in terms of the relevance and the cost efficiency, and will decide on the selection of the identification material.

All communication and promotional material will be produced according to PROPHESY specifications and visual identity.

### 4.4 Print-based dissemination

A **first project brochure** which comprises a two-fold sheet, available in English, with a clean, modern and attractive design will be produced by the WP8 leader INTRA, with its layout and content agreed by all the partners.

Our initial plans are that the external side of the leaflet presents the project logo and various information on the project including project's website, contact information, the programme under which it has been funded and the logo of the European Union. The internal part of the brochure can include the information on the project's background and scope, a brief explanation of the project domain and the rationale of PROPHESY. The final content will be decided during the brochure preparation phase.

The WP8 leader is experienced in editorial and overall publication management which will help ensure that all steps are carried out efficiently and according to the highest standards, to cover the entire lifecycle of promotional material creation and publication. We believe that the impact of the brochures and the promotional material and their appeal will be maximised through a combination of avoiding technical jargon and by selecting designs/graphical elements/images that are clear and get the messages across easily.

The brochure is to be distributed for dissemination/communication and awareness raising purposes to target stakeholders during the events, conferences, workshops and other appropriate fora.

An **updated and more detailed version** including the main results will be prepared during the second half of the project duration and will be revisited based on the project developments and needs.

### 4.5 Press-based dissemination

PROPHESY will produce **several press releases, during important moments (milestones)** of the project. According to our plans, we expect to have at least one Press Release per year. A



generic Press Release is planned to be delivered by Month 8. This will be comprised by the core project description accompanied by the logo in printable resolution and 1-2 characteristic project photos, if possible. This initial version of the Press Release will be updated following key project milestones and achievements as described above.

Press Releases will be circulated by all partners to their business networks and media contacts, through the databases that they maintain, published on the partners' websites and newsletters, but also on the external platforms and websites as already mentioned.

These Press Releases are planned to be sent for publication to every possible (local and international) information provider (e.g. journalists, magazines, electronic newspapers, newsletters, technical associations, decision makers) that the consortium will identify.

### 4.6 Scientific publications

### 4.6.1 Contribution to EU and international journals and conferences

Publications in specialised journals and conferences are a conventional but effective way to disseminate project outcomes and attract the attention of the scientific, business and public stakeholders. Our initial targets include at least 2 publications in international referred journals and 6 papers presented in scientific conferences and workshops.

**Scientific dissemination** will be performed mainly by the research partners. To support this activity, publications will be also featured on the PROPHESY website. Project partners already have an excellent track record of scientific publications in high-tier peer-reviewed journals, therefore, preference for publication will be given to the most prominent and relevant international journals and magazines.

Indicative Scientific Journals and Conferences in the field:

IEEE Transactions on Components, Packaging and Manufacturing Technology: publishes research and application articles on modeling, design, building blocks, technical infrastructure, and analysis underpinning electronic, photonic and MEMS packaging, in addition to new developments in passive components, electrical contacts and connectors, thermal management, and device reliability; as well as the manufacture of electronics parts and assemblies, with broad coverage of design, factory modeling, assembly methods, quality, product robustness, and design-for-environment.

<u>Journal of Industrial Engineering and Management</u>: is an open access scientific journal that publishes theoretical and empirical peer-reviewed articles, which contribute to advance the understanding of phenomena related with all aspects of industrial engineering and industrial management. JIEM includes contributions, but not limited to, in the following fields: Production Planning/Scheduling/Inventory, Logistics/Supply Chain, Quality Management, Operations Management and Operational Research.

<u>IEEE Internet of Things Journal:</u> publishes articles on the latest advances, as well as review articles, on the various aspects of IoT. Topics include IoT system architecture, IoT enabling





technologies, IoT communication and networking protocols such as network coding, and IoT services and applications. Examples are IoT demands, impacts, and implications on sensors technologies, big data management, and future Internet design for various IoT use cases, such as smart cities, smart environments, smart homes, etc. The fields of interest include: IoT architecture such as things-centric, data-centric, service-oriented IoT architectures, IoT enabling technologies and systematic integration such as sensor technologies, big sensor data management, and future Internet design for IoT; IoT services, applications, and test-beds such as IoT service middleware, IoT application programming interface (API), IoT application design, and IoT trials/experiments, IoT standardization activities and technology development in different standard development organizations (SDO) such as IEEE, IETF, ITU, 3GPP, ETSI, etc.

<u>Special Issue on Industry 4.0 and Smart Manufacturing</u>: This special issue of SME's journal, Manufacturing Letters, aims to provide a platform for researchers to showcase findings and explore emerging technologies in the design and implementation of smart factories. Original research contributions and/or reviews are invited for this special issue.

<u>Special Issue on integration of ICT and manufacturing under the context of Internet-of-Things</u> and Industry 4.0: This special issue is focused on the development, adoption and application of emerging ICT solutions for new generation manufacturing, within the scope of industrial information integration.

Journal of Manufacturing Systems: publishes state-of-the-art fundamental and applied research in manufacturing at the systems level. Manufacturing systems are comprised of products, equipment, people, information, control and support functions for the economical and competitive development, production, delivery and total life cycle of products to satisfy market and societal needs. The mission of the *Journal of Manufacturing Systems* is to publish archival scholarly literature with the goal of advancing the state of the art in manufacturing systems and encouraging innovation in developing efficient, robust and sustainable manufacturing systems. Pertinent to the *Journal* is research that will impact emerging manufacturing systems from the equipment level to the extended enterprise, including novel concepts and approaches as well as significant system improvement through design and optimization. Challenges are addressed within and across various scales including nano, micro and macro-scale manufacturing, as well as within and across broad sectors including aerospace, automotive, energy and medical device manufacturing.

In order to keep the project participants' submissions and publications tracked, the respective **Google Drive spreadsheet** has been created (<u>link</u>).Project partners will be asked to fill in the information in the Google Drive table each time they submit their relevant publications to scientific journals/magazines.



1		List of technical (peer reviewed) publications, in chronological order									
2	no.	Title	Main author	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publication	Year of publication	Relevant pages	Permanent identifiers (if available)	Is will open access provided to this publication?
3	1	Towards Large-Scale, Heterogeneous, Anomaly Detection Systems in Industrial Networks: A Survey of Current Trends	Mikel Iturbe, Iñaki Garitano, Urko Zurutuza, and Roberto Uribeetx eberria	Security and Communication Networks	2017	Hindawi	online	2017	1-17	https://doi.org/10.1155/ 2017/9150965	Yes
4	2										
5	3										
6	4										

Figure 13: Google Drive sheet created to list the PROPHESY scientific publications

## 4.7 Liaising with other relevant projects and initiatives

PROPHESY will be involved in clustering activities and liaising with other relevant RDI projects and initiatives. These activities include the coordination of communication and dissemination activities among projects and initiatives addressing similar topics (i.e. inclusive mobility and equity), the promotion of continuous sharing of information, dissemination materials and tools.

PROPHESY will link in particular with the Horizon 2020 projects and initiatives that are presented in the Section 3.4.

More liaisons will be explored through the EC site: Projects about Smart manufacturing.

Another initiative that will be functionally linked to PROPHESY is the European Commission's <u>Factories of the Future Initiative</u>.

PROPHESY will also link with other national and international projects and initiatives that are in line with the project's scope, e.g.

- Clean Energy Smart Manufacturing Innovation Institute, <a href="https://www.cesmii.org/">https://www.cesmii.org/</a>
- Projects/Programs supported by the National Institute of Standards and Technology, <u>https://www.nist.gov/laboratories/projects-programs</u>
- IoT World Asia, <u>https://industryofthingsworldasia.com/</u>



# 5 Communication plan

The following table present the major communication and dissemination activities scheduled for the project course (this Plan will be updated and adjusted if needed during the course of the project).

### Table 5: Schedule for communication activities

Туре	Description	Time	Responsibility / involvement	Status
PROPHESY logo	The PROPHESY logo has been designed and will be used in all documents and publications of the project	M2	INTRA	Completed
PROPHESY PowerPoint template	Template to be used for the project presentations	M3	INTRA	Completed
PROPHESY website	The online presence of PROPHESY	M5	INTRA	Completed, update is continuing
Twitter account	Create a Twitter Account for disseminating project news & developments	M4	INTRA	Completed
Facebook page	Create Facebook fan page for disseminating project news & developments	M4	INTRA	Completed
LinkedIn page	Create a LinkedIn page for engaging various stakeholders and disseminating projects news & developments to professional public	M4	INTRA	Completed
Project brochure – initial version	Designing of a brochure for promoting the project in various local and EU/International events	M6	INTRA	Pending
Updated project brochure	Updated project brochure including key project outcomes	M19- M24	INTRA	Pending
Project poster/roll- up – initial version	Designing of a poster for promoting the project in various events. A poster template can also serve as a basis for creation of new posters with updated content depending on the needs of an event	M6	INTRA	Pending



Туре	Description	Time	Responsibility / involvement	Status
Updated project poster/roll-up	Updated project poster including key project outcomes	M19- M24	INTRA	Pending
	(a) The start / commencement of the project	M6		Pending
	(b) The conclusion of the specification of the PROPHESY architecture	M12		
Press Releases	(c) The integration of a working version of PROPHESY	M20	INTRA/all	
TTESS NEIEdSES	(d) The establishment and build up of communities using PROPHESY and other results of the project	M28	partners	
	(e) The completion of the integration of the PROPHESY demonstrators, and (f) The completion of the project.	M34		
Publications	A significant number of publications are expected both in conferences and in journals	M5 – M36	All partners	Continuous
Events' participation	Participation in events (i.e. conferences, workshops, local events) in order to raise awareness about PROPHESY and disseminate the project's results	M5 – M36	All partners	Continuous
Stakeholders' evaluation workshop	Evaluation of the demonstrators from the stakeholders' viewpoints (T7.5)	M33 – M36	JLR/All partners	Pending
Clustering bodies workshop	Engagement of standardization bodies and EU clusters and associations (T8.3)	M22 – M24	I-CARE/All partners	Pending
Ecosystem building workshop	Engaging stakeholders in the project's ecosystem (T8.5)	M13 – M15	INTRA/All partners	Pending
e-Newsletter	Diffusing project news, achievements and events, in the form of an e-Newsletter	M6 – M36	INTRA/All partners contributing	Continuous
Press-releases	focusing on the project's integrated PdM solutions, as well as on the benefits of individual technologies,	M12, M24, M33	INTRA/All partners contributing	Pending





Туре	Description	Time	Responsibility / involvement	Status
	platforms and demonstrators developed in PROPHESY			
Publishing on external platforms	Articles introducing PROPHESY will be also published on third parties' portals	M6- M36	INTRA/All partners	Continuous
Infographics	Creating infographics depicting the project's concepts (during the first year of the project) and results (during the more advanced project's phase when strong results are already available)	M5 – M36	INTRA/All partners	Pending
Video	Producing a video creating awareness about PROPHESY use cases and results	After M20	INTRA/All partners	Pending
Liaise with other projects/initiatives	Collaboration for mutual dissemination and knowledge exchange with other relevant projects & initiatives	M1- M36	ICARE/INTRA	Continuous
Open days	To demonstrate the PROPHESY solution	M33 – M36	PHILIPS, MAG	Pending



# 6 Monitoring and evaluation

The complete set of communication and dissemination activities will be closely monitored and evaluated by the WP8 leader in order to keep track of all ongoing activities. The deliverable "Report on Dissemination and Communication Activities" will document all the related conducted activities in three versions: D8.2 (v1, M12), D8.3 (v2, M24), D8.4 (v3, M36).

The evaluation of the Communication strategy concerns both qualitative and quantitative indicators. Once measurable objectives are defined, we will then evaluate to what degree the project has achieved the objectives set. Process evaluation will involve examining the progress of the strategy's implementation and will refer to an outreach activity that is quantifiable through the attendance of persons present from the audiences, quantity of material distributed, number of events participated, the development and dissemination of messages and materials, media presence and traffic created in social media.

There are various key issues associated with measuring and controlling the Communication strategy and plan. Achievement is often more difficult to measure and compare, and thus needs to be carefully quantified and measured according to the specific type of action involved. The objectives chosen must be realistic, clearly defined, relevant, and coherent; the means of measurement must be objective, clearly defined and quantified, and the measurement process must not involve significant levels of cost relative to the objectives themselves. The evaluation needs to be continuous or incremental as much as possible, in particular for non-repetitive actions. Finally, the measurement of different actions must allow some degree of comparison with other actions and/or alternatives.

The proposed **analysis framework** will aim at measuring various quantitative figures, as well as the impact of promotional efforts on the attitude of the receivers of the communications messages. This will be feasible through the combination of a set of measurement procedures, which will provide a clear view of the promotional activity outcomes in terms of behavioural trends.

In full accordance with the PROPHESY needs, we will implement **a five-step measurement cycle model**, spanning from objective identification to data driven optimisation:

- 1. We identify our core objectives (e.g. raise awareness, increase engagement i.e. acquire more contacts, acquire more participants to our events).
- 2. We set goals for our promotional tactics. We concentrate on how to accomplish our objectives (e.g. inform visitors through the content of our website, intensify events promotion, etc.).
- 3. We identify our Key Performance Indicators (KPIs) the metrics that play a crucial role to the success of the aforementioned utilized tactics, and set the expected achievable qualitative and quantitative targets.



- 4. We measure the progress and impact of the conducted activities based on these metrics on a regular base. Such metrics will allow having a constant view of the amount and the effectiveness of the dissemination activities conducted.
- 5. We adjust and optimise the communication strategy towards achieving the expected outcomes and maximising visibility.

The tools, products and activities outlined in this Communication strategy will be monitored, measured, evaluated and realigned on an ongoing basis.

The table below presents the Key Performance Indicators and the achievable targets set for each type of the communication activities:

Dissemination activity	Target audience	Value
White Papers	Manufacturers, Machine Vendors, PdM Solution Providers	>=3
Participation in Exhibitions	Manufacturers, Machine Vendors, PdM Solution Providers	>=3
Participation in Conferences	Manufacturers, Machine Vendors, PdM Solution Providers, Reseachers, PdM Practitioners	>=4
Participation in Workshops	Manufacturers, Machine Vendors, PdM Solution Providers, Reseachers, PdM Practitioners	>=4
Organization of Workshops	Manufacturers, Machine Vendors, PdM Solution Providers, Reseachers, PdM Practitioners	>=2
Presentations to Potential Customers	Manufacturers, Machine Vendors, PdM Solution Providers	>=20
Journal Publications	Researchers, academics, PdM consultants and practitioners	>=5
Conference Publications	Researchers, academics, PdM consultants and practitioners	>=12
Dissemination in Events outside Europe	I4.0 Manufacturing initiatives in USA and Asia	>=2
Participation in EFFRA, BDVA and AIOTI Meetings	EU projects, EU policy makers, Manufacturers, Machine Vendors, PdM Solution Providers, Reseachers, PdM Practitioners	All
Direct Contacts with Target Customesr	Manufacturers, Machine Vendors, PdM Solution Providers	>=50

### Table 6: Key Performance Indicators (KPIs) for dissemination and communication activities



Presentation to Technology Platorms and Associations	Manufacturers, Machine Vendors, PdM Solution Providers, Reseachers, PdM Practitioners	>=3
Communication activity	Target audience	Value
Press Releases	Manufacturers, Machine Vendors, PdM Solution Providers	>=4
Newsletter Issues	Manufacturers, Machine Vendors, PdM Solution Providers, Researchers, Maintenance Practitioners	>=4
Production of leaflets	Manufacturers, Machine Vendors, PdM Solution Providers, Researchers, Maintenance Practitioners, General Public	>=2
Stakeholders Workshops	Manufacturers, Machine Vendors, PdM Solution Providers, Researchers, Maintenance Practitioners	>=3
Presence in Social Media Sites	Manufacturers, Machine Vendors, PdM Solution Providers, Researchers, Maintenance Practitioners, General Public	>=1000 (followers)
Video Presentation	Manufacturers, Machine Vendors, PdM Solution Providers, Researchers, Maintenance Practitioners, General Public	>=2





# 7 Conclusions

This deliverable presented the PROPHESY Communication Strategy and Plan, an internal instrument to provide a consistent framework for all activities needed to disseminate and sustain the concepts, achievements, as well as technical and knowledge results developed within the project.

The consortium recognises that dissemination, communication and engagement activities are an essential and pervasive activity throughout the project's life, and integrated within all its work packages. Therefore, the present Communication plan illustrates in clear terms the rationale behind the strategy and clarifies all dimensions and tools necessary to communicate the core messages and results of the project in a very effective and comprehensive way.

Various activities will be realized throughout the project's lifetime in order to help PROPHESY achieve its purposes. Promotion of the project online and via participation in the events, organisation of workshops, a number of scientific publications in journals and conferences, a book chapter, high-quality promotional material as well as collaboration with other projects & initiatives constitute some of the main actions towards the aforementioned purposes.

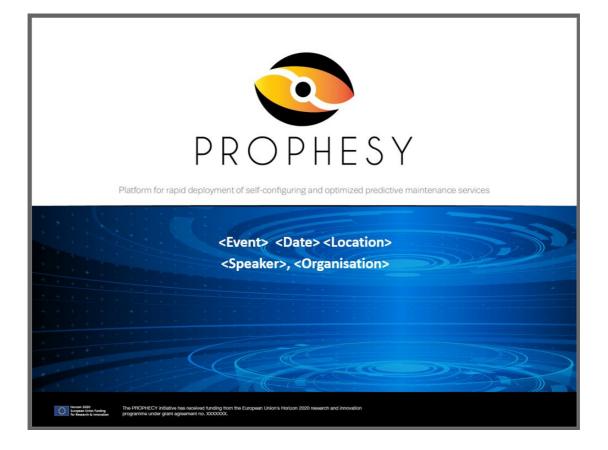
In order to measure the achieved progresses and impacts of the proposed strategy and plan, a monitoring and evaluation framework has been defined and number of indicators have been recognised and reported.

The present Communication Plan will act as a handbook for every project partner in order to perform their dissemination activities, as it list all stakeholders, communication channels, dissemination activities and corresponding key performance indicators. It also addresses the European Commission that will be requested to assist in the realisation of this plan if deemed necessary.

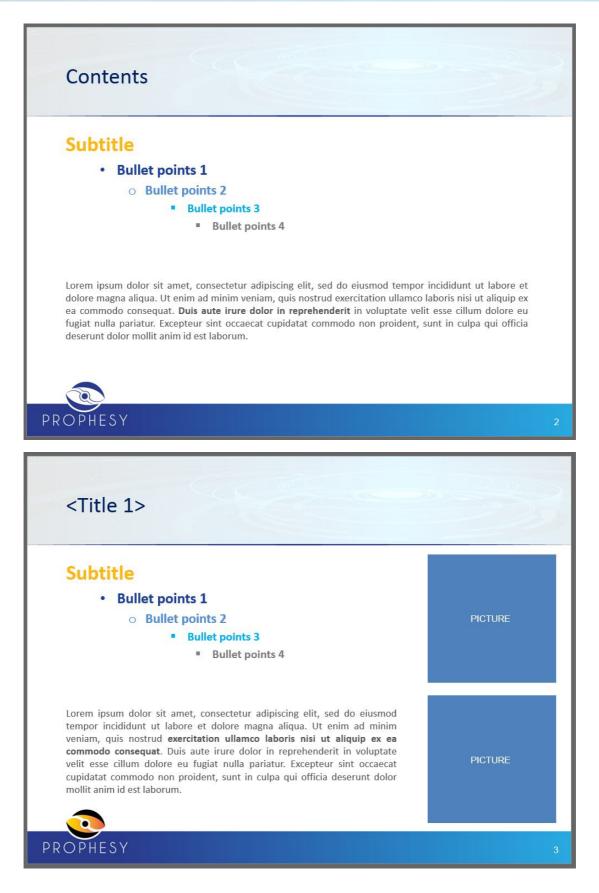
This is a living document to accommodate any customisation required. The dissemination planning will thus be constantly evaluated and revised in the course of the project duration.



# Appendix A PowerPoint presentation template









### <Title 1>

### Subtitle

## Bullet points 1

- Bullet points 2
  - Bullet points 3
    - Bullet points 4

#### BOX 1

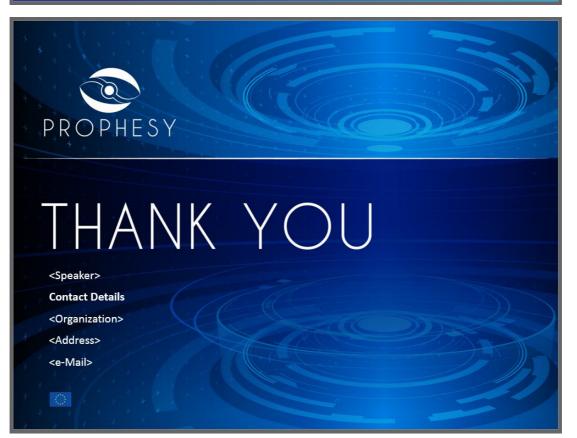
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#### BOX 2

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D8.1 – Dissemination and Commination Plan Final – v6.0, 28/02/2018

