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Executive Summary

This document presents the first release of the “*Master Dissemination and Communication Plan*” for the European funded project COCOP (deliverable D7.2), including the formulation of the COCOP dissemination strategy and the action plan focused on the first half of the project (month 1-21). A new release of this deliverable shall be elaborated and published at midterm (month 21) including, if needed, an update of the dissemination strategy in accordance with the findings gained during the first half of the project.

Proper project dissemination and communication is a key in order to ensure the maximum impact of the COCOP project. The main goal of the planned dissemination activities is to increase the visibility of the COCOP project on selected communities and target groups, at both European and International level, in order to promote the implementation and use of the project results (exploitation), always taking into account confidentiality and IPR protection aspects. All partners of the consortium will contribute to the COCOP dissemination, according to their foreseen role and effort and using all available tools and channels.

This deliverable outlines the COCOP dissemination strategy in terms of identification and description of the dissemination key elements:

- the objectives of the dissemination (*why*, mission & vision)
- the subjects of dissemination (*what* will be disseminated)
- the target audience (to *whom* it will be disseminated)
- the timing (*when* the dissemination will take place)
- the dissemination tools and channels (*how* to reach the target audience)
- the responsibilities for dissemination (*who* will perform the dissemination)
- the rules for performing the dissemination activities
- the way to evaluate and assess the impact of the dissemination activities

It also includes a description of the actions foreseen for the first half of the project (month 1- month 21), explaining in more detail the activities that have already been carried out (mainly the COCOP visual identity, dissemination material, website and social networks).

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1 Introduction

European process industry, which represents 20% of the European manufacturing base, faces a strong need to increase product quality and reduce operating costs and environmental footprint. COCOP aims at contributing to satisfy this need and to strengthen the global position of the European process industry, proposing a plant-wide monitoring and control by using the model-based, predictive, coordinating optimisation concept in integration with plant's automation systems.

A complex plant comprises of continuous and batch unit processes with a dynamic behavior, so a plant-wide monitoring and control is a requirement for achieving economically and environmentally efficient operation. But plant-wide optimization is a huge problem and difficult to solve. The COCOP concept is based on the **decomposition-coordination optimisation** of the plant operations: the overall problem is decomposed into unit-level sub-problems, so that the solutions of sub-problems are coordinated to plant-wide optimal schedule using high-level coordination, enabling real-time optimisation of the plant.

The COCOP solution can be applied to any large industrial production site because it relies on general methods such as modelling of dynamics, data analysis and optimization, but the project will research, demonstrate and validate the concept on two pilot cases (copper and steel manufacturing process) and analyse the transferability to other two sectors: the chemical and water treatment processing.

COCOP project also combines the technological development with a **social innovation process** of co-creation and co-development for improving effectiveness and impact of the innovations, their implementation process and the related organisational and personnel development.

The use of the COCOP solution can provide different:

- *Economical benefits*: increasing the productivity and reducing operation costs due to an optimal performance of the processes that allows reducing the use energy consumption and raw materials, the number of defects/rejects, etc.
- *Environmental benefits*: increasing the sustainability of the process industry (i.e. reduction of pollution, greenhouse gas emissions and energy/raw materials consumption) as well as being better prepared to meet existing and emerging regulatory mandates in terms of environment, quality or safety aspects.
- *Social benefits*: improving the personnel development and the working conditions of plant operators by developing new process-control tools which support operating work and enable operators to understand the functioning of the whole plant. In addition, the new tools could be used for the operators training in the form of on-the-job-learning.

COCOP can offer therefore: (i) new tools to the process industry to improve its competitiveness and the operators working conditions and competences, (ii) new solutions to the automation systems suppliers to integrate them in their systems and provide a more added-value product and (iii) a methodology for combining technological innovation with a social innovation process of co-creation and co-development that could be applied to any sector.

Dissemination and communication of project results (both within and beyond the project's own community) are key activities in order to ensure the maximum impact of the COCOP project and facilitate the exploitation activities.

This document is organised in the following sections:

- Section 1: introduces the main goals and features of the project
- Section 2: contains the information about the scope and objectives of this deliverable
- Section 3: presents the Dissemination and Communication plan, illustrating the objectives of the dissemination and the main elements of the dissemination strategy (subject, timing, target audience, tools and channels and the dissemination management policy)
- Section 4: presents the planned activities for the first half of the project (month 1 –month 21)

2 Scope and objectives of this deliverable

This document is the deliverable D7.2 of the WP7 of the COCOP project and is associated to the *task 7.1. Communication and Dissemination*. The scope of this document is to present the first version of the dissemination and communication plan for the COCOP project, including the formulation of the COCOP dissemination strategy and the action plan focused on the first half of the project (month 1-21).

A new release of the deliverable D7.2 (i.e. D7.3) shall be elaborated and published at midterm (month 21), including a detailed report of the dissemination and communication activities performed in the first half of the project and the action plan for the last part of the project, and also, if needed, an update of the dissemination strategy in accordance with the findings gained during the first half of the project.

Finally, at the end of the project, a survey of the dissemination and communication activities carried out along the whole project lifetime will be elaborated and published (deliverable D7.6 “*Dissemination and communication actions survey*”).

This plan represents the strategic vision of the Consortium in terms of dissemination of the COCOP project itself, and of its achievements and outputs as well. The main objective of the planned dissemination activities is to increase the visibility of the COCOP project on selected communities and target groups, at both European and International level, in order to ensure the maximum impact of the project and to promote the exploitation of the project results.

This deliverable outlines the COCOP dissemination strategy in terms of identification and description of the dissemination key elements:

- the objectives of the dissemination (mission, vision)
- the subjects of dissemination (what will be disseminated)
- the timing of the dissemination (when dissemination will take place)
- the target audience (to whom it will be disseminated)
- the dissemination tools and channels (how it will be disseminated)
- the responsibilities for dissemination (who will perform the dissemination)
- the rules for performing the dissemination activities
- the way to evaluate and assess the impact of the dissemination activities

It also includes a description of the actions foreseen for the first half of the project (month 1- month 21).

3 Dissemination and Communication Plan

3.1 Dissemination goal and strategy

The final goal of the dissemination and communication activities is to promote the COCOP project and spread the COCOP's results to the largest possible concerned audience (at the national, European and international level) in order to encourage the implementation and use of the project results (exploitation), always taking into account the confidentiality and IPR protection aspects.

In more detail, the objectives of the dissemination are:

- To raise public awareness about the project, its expected results and progress within defined target groups
- To disseminate the fundamental knowledge, the methodologies and technologies developed during the project
- To exchange experience with projects and groups working in the field in order to join efforts, minimize duplication and maximize potential
- To pave the way for a successful (commercial and non-commercial) exploitation of the project outcomes

The objective of the dissemination strategy is to identify and organise properly the activities needed to achieve these objectives. The following sections describe the main pillars of the dissemination strategy: (i) subjects (*what* will be disseminated), (ii) target audience (*who* will most benefit from the project results and who would be interested in learning about the project findings), (iii) the timing (*when* dissemination will take place); (iv) tools and channels (*how* to reach the target audience) and (v) dissemination management and policy.

3.2 Subject of Dissemination

The following general subjects of dissemination have been identified up to now:

- COCOP project itself: goals, approach, pilots cases and expected benefits
- The application of the decomposition-coordination optimisation method
- The social innovation methodology applied to the pilot cases
- The techniques and methodologies used for the technical development of the project in all the involved areas (simulation, modelling, monitoring, control, automation, optimization,..)
- The achieved results and the validation of the COCOP approach in two pilot cases (steel and cooper)
- The transferability to other sectors such as the chemical and water treatment processing
- The sustainability indicators and Key Performance Indicators in the process industry

3.3 Timing of Dissemination

Dissemination activities are planned in accordance with the stage of development in the project. Although a number of dissemination actions will take place during the first half of the project, the most significant dissemination activities will take place as final research results are available. It is also important to take into account that plant owners' investment decision might require extensive time, so timely communication on the project results will ease the successful commercialisation of the results.

The dissemination will follow the AIDA principle: *Awareness* to attract the attention of the target audience, *Interest* of the target audience, *Desire* of the target audience to know more about the project and *Action* to lead the target audience towards get involved in the project and to promote its results to facilitate their exploitation. According to this principle, three phases are considered:

- Initial phase (*awareness*) (month 1 – month 9): focused on increasing the visibility of the project and mobilising stakeholders and multipliers. At this phase, the main activities will be related to the implementation of the dissemination tools (website, social networks, visual identity), preparation of dissemination material, general presentations of the COCOP project and launching of the COCOP Special Interest Group.
- Intermediate phase (*Interest/Desire*) (month 9- month 30): focused on informing and engaging to the target stakeholders when preliminary results become available. At this phase, the project results and their future applications will be presented in journals and conferences to specialized audience with the objective of stimulating the interaction with the concerned scientific and industrial community and determining the stakeholders' expectations.
- Final phase (*Action*) (month 30-42): focused on encouraging further exploitation of the COCOP outcomes (transfer to other industries, replicability,...). At this phase, the results of the validation of the COCOP approach at the two pilot cases and the transferability analysis will be presented in journals, conferences and industrial events. One of the main dissemination actions at this phase will be the organization of the COCOP workshop at the end of the project, as it is explained later.

3.4 Target audience

Taking into account the goal of the COCOP project, the target audience for the dissemination activities has been divided in the following groups:

1. *Industrial Community* → raise awareness of and interest in the project results to promote the exploitation and co-operation opportunities.

As explained in the introduction, COCOP aims at strengthening the global position of the European process industry and proposes a plant-wide monitoring and control by using the model-based, predictive, coordinating optimization concept in integration with plant's automation systems. So, from the exploitation side, the target audiences from the industrial community will be:

- a. Process industry: European process industry represents 20 per cent of the European manufacturing base (both in turnover and employment). Approximately 450.000 companies generate €1 600 billion in turnover and providing 6.8 million jobs (<http://www.spire2030.eu/spire-vision/spire-roadmap>). Although the dissemination strategy will address the Process Industry in general, it will pay special attention to the sectors directly involved in the project: (i) steel (with more than 500 plants in Europe), (ii) copper (with 40 Outotec Flash smelter plants in the world), (iii) chemical (with more than 3000 chemical production sites in Europe) and (iv) water (with more than 175 large urban wastewater treatment). The message for this audience would be:

“Increased economic competitiveness and reduced environmental impact due to novel plant-wide control. Complex process industry plants can be operated optimally by the operators advised by a coordinating, real-time optimisation system.”

- b. Process automation industry for process industry clients: automation solution suppliers are a large industry with essential offerings to the process industry and upstream manufacturing industry. The European automation industry employs more than 100.000 people and the European industrial process automation market is €10 billion (processit.eu, 2013). The message for this audience would be:

“Plant-wide monitoring and control by an open advisor system.”

2. *Scientific Community* (universities and research centres) → enlarge the knowledge and facilitate the communication among European researchers in the research field of the COCOP project (industrial process modelling, control and optimization).
3. *“Internal” Community* (COCOP partners) → maximise the dissemination effectiveness.
Ensuring effective internal communication and dissemination among the consortium partners is a key element for two reasons. Firstly, some of the partners are potential users of COCOP project results themselves, and secondly they represent “influencers” due to their great position on the associated industrial sectors. Particularly COCOP consortium partners comprise important market players in various segments and this constitutes a natural channel for the dissemination of the project and its results to other potential users. Therefore, it is important to communicate information about the project and its results to partners’ managers, consultants and people responsible for their marketing and sales and to encourage them to share this information further to their customers and business partners. Additionally, it is important to present the project to the responsible of the operators training, so they can evaluate the potential of the COCOP system for training activities.
4. *EU projects working to similar domain* → minimize duplication and define synergies and collaboration opportunities. Especially the SPIRE community is of interest here, with projects like ProPAT, MONSOON, Consens and CoPro.
5. *Standardisation bodies* (ISA, OPC Foundation) → support exploitation by modifying relevant standards, if needed.

6. *Policy makers* → raise awareness of the relevance and economic impact of exploited research results obtained by EU-funding (the European Commission's DG develops policies and actions for the re-industrialisation of Europe and an innovative, modern, and sustainable economy).
7. *Students* → promote the COCOP research field (industrial process modelling, control and optimization).
8. *General public* → let them aware of the positive impacts generated and the relevance of EU funded research for the industry

Dissemination activities must be tailored in such a way to reach the audiences most efficiently through appropriately selected dissemination tools and channels.

3.5 Dissemination tools and channels

This section describes the main tools and channels that will be implemented/used by the COCOP partners for the dissemination of the project and its results. Some of the tools are of general purpose, while other ones are oriented to specific target groups.

3.5.1 COCOP Web page

The COCOP website (www.cocop-spire.eu) will be the main interface for communication to the public. It contains information on the COCOP objectives, the partnership, the proposed activities and the foreseen/achieved results. It will also allow having access to the dissemination material and will host a blog to facilitate the interaction between partners and interested parties. In order to maximize its visibility, free or affordable methods to increase page ranking on search engines will be used. Links from the homepages of all the partners will also be established to the COCOP site.

3.5.2 Social networks

In order to reach a broad target audience while establishing two-ways communication channels, the presence of the COCOP project in social media will be encouraged. A Twitter account (<https://twitter.com/CocopSpire>) will be used as an instant dissemination instrument for reaching the general public. In order to reflect the relation of the project with the SPIRE community, references to @Spire2030 in the COCOP tweets will be included whenever possible. On the other hand, a LinkedIn (<https://www.linkedin.com/in/cocop-project-eu-377251138/>) page will be used for reaching stakeholders and industry professionals. Official LinkedIn groups will be joined to raise awareness among automation professionals and Process Industry.

The website will have direct access to these social networks by clicking over the icons situated on a visible part of the website. In this way, it will be easy for every user to participate in this when the website is visited.

Finally, YouTube could be used for the publication of videos produced within the course of the project, provided that this does not imply any property right conflict.

3.5.3 Visual Identity and dissemination material

The visual identity (logo and style) of the project will help external audience to easily identify COCOP and contribute to the project visibility by providing a clear identity from the very beginning of the

project. Communication and dissemination tools (such as project website, Twitter, LinkedIn page,...), dissemination material (such as flyers, presentations, posters,...) and deliverables will apply the visual identity defined for the project.

Different dissemination material will be produced along the project lifetime, such as:

- Project flyers (hardcopy and electronic version) in order to provide our audiences with an attractive and written project overview and summary of the main project objectives and results. Three flyers are scheduled in the project: the 1st (see Annex III), at the beginning of the project, will focus on the project's objectives and vision, the 2nd will highlight achieved results while the 3rd and last one will show the validated key results and pilot cases. The flyers will be able to be distributed in printed form (handed out at conferences or other events) or in electronic version (PDF file). The flyers will be also downloadable from the project website.
- Short Project presentations (electronic version) describing the objectives and the main achieved results for presenting the project in different forums, such as internal presentations inside of the partners, presentations at schools/universities, visits with clients, etc. These presentations will be downloadable from the website and could be uploaded in SlideShare.
- Videos to communicate the project's vision, objectives and results. Two videos are scheduled: one animation at start of the project and one video focusing on results at the pilot cases at the end. These presentations will be accessible from the website and could be uploaded in YouTube.

Finally, the deliverables will also offer a good means for disseminating the performed activities and achieved results. Public deliverables will be accessible from the website, meanwhile confidential deliverables will be used to spread the knowledge inside the partners' organizations.

3.5.4 Special Interest Group (SIG)

The "COCOP Special Interest Group" will be created at the beginning of the project to engage stakeholders with the COCOP consortium. The SIG will be an informal group of external stakeholders interested in the project (e.g. possible beneficiaries, end users, etc.). The members of the SIG will receive information about relevant news, events and results of the project. Participation in this group will be under accepted subscription and will be managed through the website to ease the contact of the interest people/entities.

3.5.5 Channels offered by the European Commission and SPIRE

The COCOP consortium will make use of the tools offered by the European Commission and SPIRE in order to maximise the diffusion of the project.

European Commission

The EC offers different tools such as:

- The "*projects and results*" service from CORDIS that provides: (i) "project information" based on the project's grant agreement, (ii) "report summaries" that come from the publishable summaries of periodic and final reports submitted by the project participants and approved by the project officer and (iii) "Results in Brief" written by CORDIS science editors based on each report summary

- *CORDIS Wire* to publish articles on the CORDIS News and Events service
- *research*eu results magazine* that features highlights from the most exciting EU-funded research and development projects

A.SPIRE

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, and more than 130 industrial and research process stakeholders from over a dozen countries spread throughout Europe. A.SPIRE's offers different communication tools/channels for dissemination of project outputs such as:

- A dedicated page on the SPIRE website where information about all SPIRE projects and links to project-dedicated websites are published
- A section of the SPIRE website, SPIRE Newsletter and Twitter account where project related announcements can be published
- Annual projects brochure
- SPIRE event (such as Impact workshop, SPIRE projects' conference, etc.)

3.5.6 National and European technology platforms and associations

The link of the COCOP partners with a number of relevant national/European platforms and associations, closely related with the COCOP objectives, provide a great chance for disseminating the project activities and increasing the number of reached stakeholders. The Annex I collects information of some of these platforms and associations together with the type of involvement of the partners. An updated list of the platforms and associations where the partners are involved will be available in the collaborative tool (Confluence) of the project.

3.5.7 Scientific and trade journals

Scientific publications are an effective way to disseminate high-level project information and to attract the interest of representatives of the various target groups. Similarly, publications in trade journals can attract the attention of potential beneficiaries of the COCOP results. The industrial and academic partners will individually and in collaboration publish and present scientific advances in scientific journals (peer reviewed or not) and trade magazines, taking into account confidentiality and IPR protection aspects.

Table 1 provides some examples of scientific and trade journals where the COCOP partners could submit papers along the project.

3.5.8 National and international conferences

National and international conferences are a good opportunity to share the results with experts in the field and, therefore, to achieve an effective dissemination of the project. Table 2 provides some examples of national and international conferences where the project and its results could be presented.

3.5.9 Exhibitions, trade fairs and workshops

Finally, workshops and large events such as exhibitions and trade fairs will be attended by the partners to disseminate both the techniques developed during the project and the achieved results to the targeted beneficiaries of the COCOP project. Table 3 provides some examples of potential events.

3.5.10 Media and social media coverage

COCOP news in the media (newspapers, magazines, radio,...) are expected to inform to general public about the project and reflect the impact of EU research and innovation funding on European industry and environment.

3.5.11 COCOP workshop

At the end of the project, the final COCOP workshop will be organized to show the achieved results and to give the opportunity to meet potential interested clients (either on public or private field), investors, and researchers. Target audience could include different players in the scientific, industrial, financial and social fields, as well as journalists. Announcement of the COCOP workshop will be done through all the available channels (web, Twitter, LinkedIn, EU/SPIRE tools, related Platforms and Associations, etc.) to reach the maximum audience as possible.

3.5.12 Other activities

Presentations of the project at the universities will be carried out, mainly by the academic partners, in order to promote the research fields of the COCOP project.

Direct proactive communication with stakeholders during visits/meetings and internal meetings inside of the partners organizations will help raising awareness of the goal/benefits of the project.

Table 1. Scientific and trade journals

Journal/Magazine Name	Type	Journal/Magazine topics	Indexed (Yes/No)	Other relevant information
Automaatioväylä	Trade	Automation, measurements	No	A Finnish trade journal for automation engineers. The magazine has a circulation of 3200 and has six issues per year.
SIDENEWS	Trade	Steelmaking	No	It is managed by SIDEREX (the Spanish Association of Steelworks Exporters) whose main goals are to promote Spanish steel exports.
Stahl und eisen	Trade	German association magazine for steel makers, suppliers and manufactures including technical articles	No	Magazine published by German Stahlverlag
Aguasresiduales.info	Trade	Aguasresiduales.info is an information portal and magazine for professionals in the “waste water treatment plants” for Spain, Portugal and Latin America. Published articles are about products, solutions, news&events and R&D projects.	No	The information portal has also a daily newsflash sent to +/-5000 subscribers with a hit rate of 35%.
Transactions on Control Systems Technology	Scientific	Control systems technology	Yes	
Simulation Modelling Practice and Theory	Scientific	Theoretical aspects of modelling and simulation; methodology and application of modelling and simulation in any area; distributed and real-time simulation; tools for high performance computing simulation, including dedicated architectures	Yes	
Computers in Industry	Scientific	Trends in and options for the use of Information and Communication Technology in industry	Yes	

Journal/Magazine Name	Type	Journal/Magazine topics	Indexed (Yes/No)	Other relevant information
Information Systems Frontiers	Scientific	Theories and models of IS/IT systems and solutions; Pragmatic solutions to practical IS/IT problems; Computational, empirical and system developmental studies; Perspectives synthesizing recent developments in interface areas	Yes	
Journal of Cleaner Production	Scientific	Cleaner production and technical processes; Sustainable Development and Sustainability; Sustainable Consumption, Environmental and sustainability assessment	Yes	
DYNA Magazine	Scientific	Industrial innovation, engineering and management	Yes	
Computers & Chemical Engineering	Scientific	Modelling, numerical analysis and simulation; Mathematical programming (optimization); Process dynamics, control and monitoring; Plant operations, integration, planning/scheduling and supply chain; Enterprise-wide management and technology-driven policy making;	Yes	

Table 2. National and international conferences

Conference Name	Scope	Conference topics	Type of audience	Organiser
DYCOPS - IFAC Symposium on Dynamics and Control of Process Systems	International	Process optimization and plant-wide control; Model-based control; Performance/process monitoring; Process planning/scheduling and control	Researchers and practitioners	IFAC
NPCW – Nordic Process Control Workshop	International	Process Control	Researchers and practitioners	The Nordic Working Group on Process Control
ESCAPE - European Symposium on Computer Aided Process Engineering	International	Process engineering; Modelling; Optimization; Computers	Researchers and practitioners in the field of CAPE (Computer Aided Process Engineering)	EFCE; TU Graz; TU Wien
HICSS- Hawaii International Conference on System Sciences	International	Information systems	Researchers and practitioners	Shidler College of Business, Hawaii, USA
INCOM - IFAC Symposium on Information Control Problems in Manufacturing	International	Industrial informatics	Researchers and practitioners	IFAC
INDIN - International Conference on Industrial Informatics	International	Industrial informatics	Researchers and practitioners	IEEE
EUROSIM Congress	International	Simulation and modelling	Researchers and practitioners	Federation of European Simulation Societies
ECCE - European Conference on Cognitive Ergonomics	International	Human-technology interaction; cognitive engineering	Researchers and practitioners	European Association of Cognitive Ergonomics
International Copper Conference	International	Mineral Processing; Sustainable Development; Process Control	Copper industry	MetSoc et al
World Copper Conference	International		Copper industry	
ESTAD – European Steel technology and application days	International	Steelmaking, Rolling, Environmental and energy	Researchers and practitioners from equipment suppliers, plant manufacturers & steelmakers	ASMET, AIM, A3M, Steel Institute VDEh and Jernkontoret

Conference Name	Scope	Conference topics	Type of audience	Organiser
IFAC-MMM - Symposium on Automation in Mining, Mineral and Metal Processing	international	Process modeling; Control and optimization; Advanced process control; Data mining and statistical analyses; Artificial intelligence, machine learning systems	Professionals, researchers and experts	IFAC, Technical committee 6.2 Mining, Mineral and Metal Processing
European Continuous Casting Conference	International	Steelmaking (Continuous Casting)	Steelmakers, Researchers	ASMET
Materials Science and Technology	International	Materials Science	Material researchers and industries	AIST, ASM, TMS
Conference of Metallurgists	International		Researchers and practitioners	MetSoc

Table 3. Events (Workshops, Fairs and exhibitions)

Fair/workshop Name	Scope	Event topics	Audience profile	Web	organiser
Hannover Messe	International	Industrial automation; IT; Industrial supply; Energy;	Researchers and practitioners	http://www.hannovermesse.de/	Deutsche Messe
METEC – International metallurgical trade fair	International	Metallurgy; Steelmaking	Researchers and practitioners	http://www.metec-tradefair.com/	
STAHL - International annual meeting of steel makers and suppliers	International	Steelmaking	Professionals, researchers and experts	http://www.stahl-online.de/	Steel Institute VDEh
SMAgua - International fair on water in Zaragoza	International	Environment - Water Treatment	Engineering and exploitation companies.	https://www.feriazaragoza.es/smagua-2017	Feria de Zaragoza
iWater – Salón internacional del ciclo integral del agua	International	Environment - Water Treatment	Engineering and exploitation companies.	http://www.iwaterbarcelona.com	

3.6 Dissemination management

A special section in the collaborative tool of the project (Confluence) has been created for the management of the dissemination activities (planning, monitoring, evaluation, storing dissemination material, etc.) as is shown in Figure 1.

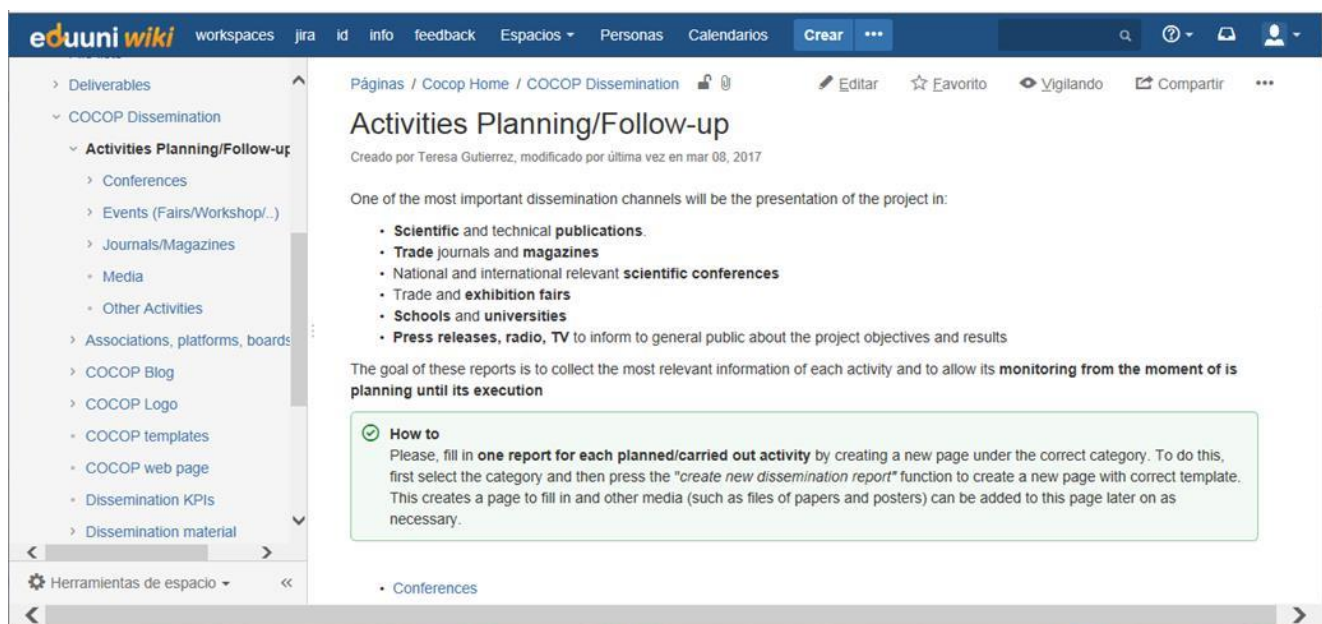


Figure 1. Section for the dissemination management in the collaborative tool (Confluence)

3.6.1 Distribution of responsibilities

According to the Article 29.1 of the Grant Agreement *“each beneficiary must — as soon as possible — ‘disseminate’ its results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications (in any medium)”*. Therefore, every possible opportunity will be embraced, by individual partners or on collective basis through joint appearance by more than one partner, to make COCOP project known among technicians and general public as well.

TECNALIA will act as Dissemination and Communication Manager of the project coordinating and supervising all the dissemination activities. On the other hand, all partners of the consortium will contribute to the COCOP dissemination according to their foreseen role and effort and using all available tools and channels (thus for instance by participating and giving presentations at conferences and workshops, publishing papers, networking, attending to fairs and showcases where technical achievements and prototypes can be shown to stakeholders, etc.) for the purpose of the project results adoption and successful future commercialization of COCOP outputs.

3.6.2 Dissemination policy and rules

Dissemination activities in COCOP project are deeply joined with the intellectual property rights protection and confidentiality aspects that are clearly stated in the articles 23a and 36 of the grant agreement respectively and adjusted in the Consortium Agreement. It is important to find out a good equilibrium among the interests of academia and industry partners. Usually, the academia partners

tend to publish all information they have at disposal, which is caused by academia common motivation systems, while the industrial partners' decision whether, when and where to publish can depend on commercial considerations.

The basic regulation of the dissemination activities in the consortium agreement states that:

During the Project and for a period of 1 year after the end of the Project, the dissemination of own Results by one or several parties including but not restricted to publications and presentations, shall be governed by the procedure of Article 29.1 of the Grant Agreement subject to the following provisions:

- *Prior notice of any planned publication shall be given to the other Parties at least 45 calendar days before the publication.*
- *Any objection to the planned publication shall be made in accordance with the Grant Agreement in writing to the Coordinator and to the Party or Parties proposing the dissemination within 30 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.*

An objection is justified if:

- (a) the protection of the objecting Party's Results or Background would be adversely affected*
- (b) the objecting Party's legitimate academic or commercial interests in relation to the Results or Background would be significantly harmed.*

The objection has to include a precise request for necessary modifications.

If an objection has been raised the involved Parties shall discuss how to overcome the justified grounds for the objection on a timely basis (for example by amendment to the planned publication and/or by protecting information before publication) and the objecting Party shall not unreasonably continue the opposition if appropriate measures are taken following the discussion.

The objecting Party can request a publication delay of not more than 90 calendar days from the time it raises such an objection. After 90 calendar days the publication is permitted, provided that Confidential Information of the objecting Party has been removed from the Publication as indicated by the objecting Party.

A Party shall not include in any dissemination activity another Party's Results or Background without obtaining the owning Party's prior written approval, unless they are already published.

The project partners will follow the open access principle, according to the article 29.2 of the grant agreement. They will publish their results based on the green model (http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hioa-pilot-guide_en.pdf) and use their organisation's existing institutional repositories to offer free online access to scientific journal articles and reports to increase the visibility and availability of COCOP output. Both the Project Coordinator (Tampere University of Technology) and the Dissemination manager (TECNALIA) have own repositories following the 'green' open access model. According to the Grant Agreement:

the bibliographic metadata must be in a standard format and must include all of the following:

- *the terms "European Union (EU)" and "Horizon 2020";*
- *the name of the action, acronym and grant number;*
- *the publication date, and length of embargo period if applicable, and*
- *a persistent identifier.*

According to the article 29.4 of the Grant Agreement, unless the Commission requests or agrees otherwise or unless it is impossible, it is necessary to include the European emblem and the following statement of financial support in all the dissemination documents and applications for protection of results:

“This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 723661”.



When displayed together with another logo, the EU emblem must have appropriate prominence.

According to the article 29.5, any dissemination of results must include the following Disclaimer excluding Commission responsibility:

“This [insert type of activity] reflects only the author’s views and the Commission is not responsible for any use that may be made of the information contained therein”

Finally, in addition to the acknowledgement to the EU, all the dissemination material will include:

- the acronym of the project : COCOP
- the logo of the project , if feasible
- the project’s website URL (www.cocop-spire.eu)

3.6.3 Dissemination activities planning and follow-up

As described in the previous sections, a key element for the dissemination of the project results is their presentation in: scientific and technical publications, trade journals and magazines, national and international relevant scientific conferences, workshops, exhibitions, fairs and the media (Press releases, radio, TV,...).

For the planning and follow-up of these activities, a section in the collaborative tool of the project has been designed in order to create and store the “Dissemination reports” of each activity (see Figure 1). The goal of these reports is to collect the most relevant information of each activity and to allow its monitoring from the moment of its planning until its execution. In this way, the partners will start filling the report as soon as they decide to perform an activity, and then, when the activity is finished, they will finish the report.

Five different types of reports has been defined depending on the type of activity: (i) paper on a journal/magazine, (ii) presentation in a conference, (iii) participation in an event (fair, workshop,...), (iv) presence in the media (press, TV,...) and (v) any other type of activity. The templates for each one of the reports are included in the Annex II, but mainly they include:

- general information about the event (name, type, scope, audience,...)
- information about the action (title, topic, authors,...)
- feedback gathered by the respective partners from the target audience (if applicable) and eventually gained contacts for further dissemination purposes

3.6.4 Evaluation and assessment

The evaluation of the COCOP dissemination activities and the assessment of their impact will be carried out through different means. On the one hand, the partners have set up several Key Performance Indicators (KPI), together with their main metrics and a numerical target for each one

of them for the first half of the project (see Table 4). The target has been estimated taking into account the individual partner's input and considering a minimum threshold to have proper dissemination. It is foreseen that the number of dissemination actions (papers, conferences, workshops, fairs,...) will increase as the project progresses and results are achieved. If needed, new KPIs/metrics could be defined along the project.

Table 4. Key Performance Indicators and metrics for the evaluation of the dissemination activities, and target values for the first half of the project (month 1-month 21)

ID	Indicator	Metrics	Target Value (M1-M21)
KPI1	General public awareness through the website and social media	Number of visits on the project website	75 visits per month
		Number of posts on the blog of the website	1 post per month
		Number of members of the COCOP debate group in LinkedIn	60
		Number of contributions to LinkedIn/Twitter	30
		Number of presentations uploaded to the Website/SlideShare	2
		Number of videos uploaded to Website/Youtube	1
KPI2	Awareness of the Scientific Community interest	Number of papers in scientific journals	4
		Number of presentations in scientific conferences/workshops	8
KPI3	Awareness of the industrial Community interest	Number of papers in trade journals	5
		Number of participations at events with industry (fairs, exhibitions, workshops,...)	3
		Number of Interest expressions from industry to receive more information + industrial members of the Special Interest Group (SIG)	10
KPI4	Coordination with other research projects	Number of participations in joint forums with other national/international projects	3
KPI5 ¹	COCOP final workshop	Number of people attending the final COCOP workshop	70

¹ This indicator does not apply to the first period, but it is included to have an overview of all the KPIs defined for the project

A section of the collaborative tool of the project collects the table of the KPIs and the target values, together with the real and planned values. During the WP7 meetings and/or the Project progress meetings organised every 6 months, the real and planned values of the KPIs will be analysed, and, if needed, contingency plans could be defined in case the threshold is not reached. The update of the Dissemination and Communication plan at month 21 will also analyse the real performance of the KPIs up until that moment and will include new target values for the second half of the project. Finally, at the end of the project, the deliverable “D7.6. *Dissemination and communication actions survey*” will analyse all the activities performed and collect the final performance of the KPIs.

On the other hand, for the update of the Dissemination and Communication plan at the middle of the project, the partners will carry out an internal evaluation of the project dissemination effectiveness in order to detect the potential weaknesses and propose further actions to improve the dissemination plan. This internal evaluation will be performed through a specific questionnaire implemented in Confluence and based on questions like:

1. Do the dissemination activities address all the relevant target groups?
2. Are the individual target groups addressed by means of proper communication channels and tools?
3. Are the dissemination activities carried out timely, in accordance with the schedule of principal project outcomes?
4. Is the dissemination material suitable and enough?
5. Does the web provide useful content to all the identified target groups (measured by the number of visitors and feedback provided by them)?
6. Are the number of dissemination activities towards research community sufficient (i.e. the number of papers in journals, workshop and conference proceedings etc.)?
7. Are the number of dissemination activities towards the industrial community sufficient (i.e. number of presentations at industrial events)?
8. Are the number of dissemination activities towards the general public sufficient (web activities, articles, papers, presentations)?

In addition, all events organised by the consortium will be evaluated afterwards by questionnaires to participants. These evaluations will be used as input to improve later such events.

4 Work plan for the first 21 months

This section describes the main dissemination and communication activities planned for the first period of the project (from month 1 to month 21). Some of these activities have already been carried out while most of them are in progress.

4.1 Design of the COCOP logo and visual identity

The COCOP logo (Figure 2.a) was designed by a professional marketing company at the beginning of the project and will be inserted in all the deliverables, reports and dissemination material/tools. The logo includes the name of the project. Figure 2.b shows the project style defined for COCOP presentations.

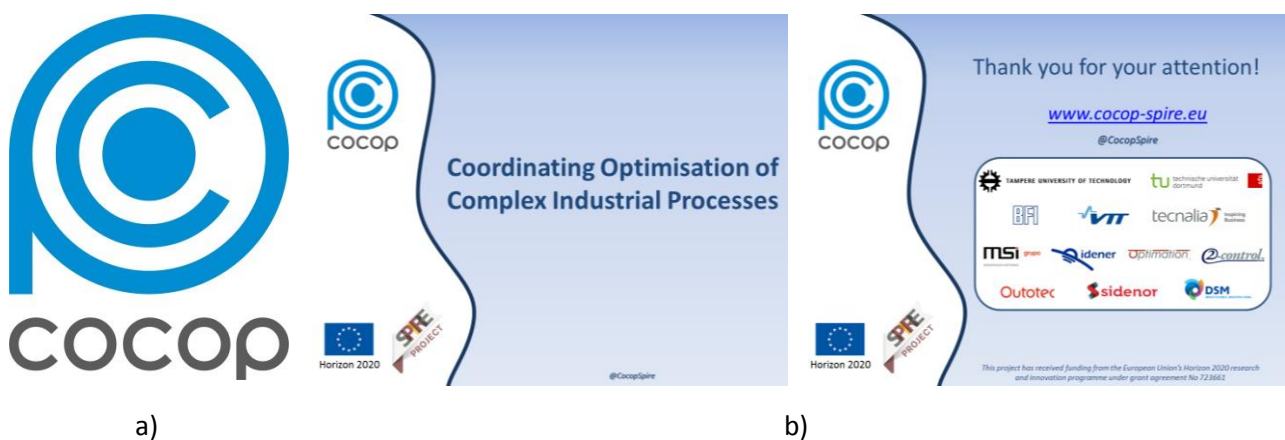


Figure 2. a) COCOP logo; b) COCOP project style

4.2 Implementation and update of the COCOP Web page

The COCOP website www.cocop-spire.eu is available from the month 3 of the project and it was described in the deliverable D7.1. *Project website*. Oriented to the dissemination, the website provides essential information related to the project and the partners through different sections (see Figure 3):

- *Home* → provide an overview of the project
- *Project details* → provide a description of project objectives, pilot cases and work packages
- *Consortium* → present the involved partners
- *Documents* → provide access to public documents of the project (public deliverables, open access papers, etc.) and dissemination material (flyers, presentations, videos,...)
- *News* → provide general information (both internal and external) related to the project
- *Events* → provide information about events organised/attended by the consortium (meetings and dissemination events)
- *Special Interest Group* → manage the subscription of the interested people/organisations for the SIG



Figure 3. COCOP webpage Home screenshot

- **Blog** → allow sharing information related to the COCOP topics and facilitating the interaction with the interested parties. In order to avoid the risks of having an open access blog (without any control of the messages that are posted), only the COCOP partners have access to upload posts in the blog and the discussion with the external community is activated in the “COCOP debate group” created in LinkedIn, as it is explained later. Figure 4 shows the working scheme: the full text of the post is uploaded in the website blog that provides a link to the new conversation started in the COCOP debate group and reciprocally the new conversation has a link to the post of the website blog.



Figure 4. Working scheme of the COCOP blog

The COCOP webpage provides links to the H2020 and SPIRE webpages and to the COCOP Twitter account and LinkedIn page. It also allows using the Google Analytics utilities in order to monitor the website access: number of visitors, duration of the visits, geographical area, pages of the website more visited, etc.

The website will be updated regularly by the webmaster upon with inputs of partners. In relation to the blog, it will be updated at least monthly with information about the project (deliverables, main

results, etc) or information about the technologies related to the COCOP goals/activities (new trends, tools, products, etc). The blog has started in March 2017 with the post titled “*Efficient plant operation – a plant-wide approach*” (Figure 5) to encourage the discussion about the COCOP approach: plant-wide monitoring using the decomposition-coordination optimisation concept.

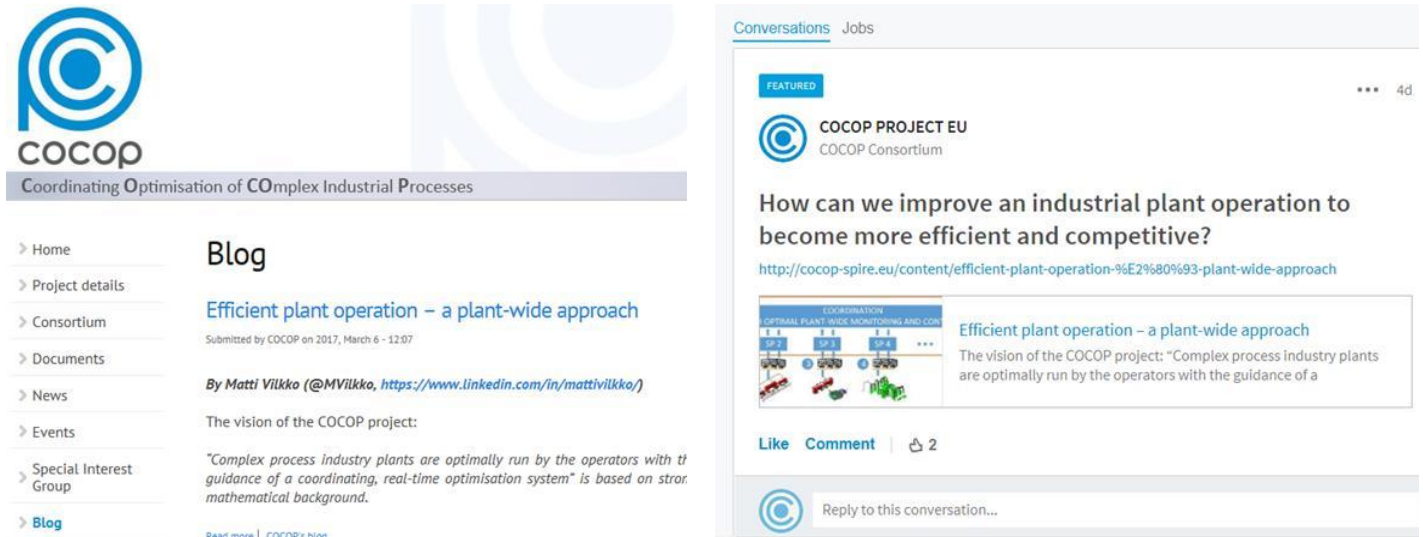


Figure 5. First post of the COCOP project: post in the website (on the left) and conversation in the linkedIn COCOP debate group (on the right)

Discussion posts for the next 12 months have already been planned and will address the following topics: challenges of the process industry in general and of the two COCOP pilot cases (steel and cooper), automation solutions, optimization tools, data mining, Industry 4.0, social innovation, agile methodologies, sustainability indicators and Key Performance Indicators in industry.

4.3 COCOP at social networks

The Twitter account for the project @CocopSpire and the LinkedIn profile (COCOP) are already available (see Figure 6) and will be used to publish announcement and relevant information of the project.

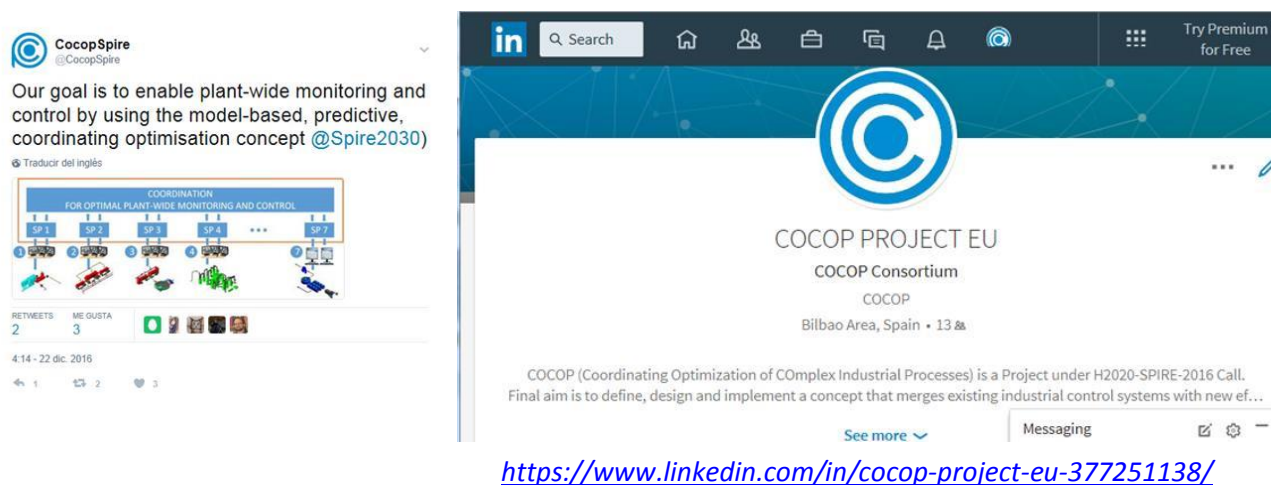


Figure 6. COCOP Twitter account and LinkedIn profile

Official LinkedIn groups will be joined to raise awareness among interested stakeholders, at this stage three groups have been joined: Industrial Automation and Process Controls Network, Industry 4.0 and Automation Project Management.

In addition, a COCOP debate group has been created in LinkedIn: “COCOP: Process Industry Automation and Optimization” (<https://www.linkedin.com/groups/8596768>). The main goal of this group is to promote discussion and share information on the topics related to industrial process simulation, modelling, monitoring, control, automation and optimization. As it was explained above, this group will also be used as discussion platform for the post of the website blog.



4.4 Preparation of dissemination material

A first flyer of the COCOP project was prepared at the beginning of the project. It presents the goals, the approach, the consortium and the main (expected) benefits (see Figure 7 in the annex III). 1.500 copies of the flyer have been printed and an electronic version is available in the website. A second flyer will be produced at the middle of the project.

A general presentation of the project has also been produced and uploaded to the website and SlideShare. It describes the motivation and objectives, the approach, the pilot cases, the potential impact and the consortium of the project. New presentations will be produced during the first period to highlight the achieved results.

Finally, a short video (around 3 minutes) will be produced by the month 9 in order to present the project (goals, pilot cases and potential benefits) in a way easily understandable by the target end users.

4.5 Creation and management of the Special Interest Group (SIG)

The rules for the management of the SIG have already been agreed between the partners and the mechanism for the subscription of the members has been implemented and is available in the web (<http://www.cocop-spire.eu/content/special-interest-group>). The SIG will be launched by the month 7.

4.6 Preparation of contributions for the EC and SPIRE dissemination channels

The partners will prepare the material needed to make use of the utilities offered by the EC and SPIRE explained in the above section. Until the moment of submitting this document:

- A short description of the project together with the logo and link to the COCOP web page has been published in the projects page of the SPIRE website (<https://www.spire2030.eu/projects/our-spire-project>)
- Information of the project for the next SPIRE newsletter and the annual project brochure has been submitted

4.7 Publications in scientific and trade journals

The partners will publish the project activities and results in different scientific and trade journals. Table 5 shows the publications that have already been performed and the planned ones up to now. The target of publications for the first period (month 1-21) is indicated in Table 4 of section 3.

4.8 Presentations at national and international scientific conferences

The partners will present the project activities and results at national and international conferences. Table 6 shows the presentations that have already been performed and the planned ones up to now. The target of presentations at conferences for the first period (month 1-21) is indicated in Table 4 of section 3.

4.9 Participation at exhibitions, fairs and workshops

The partners will attend different events such as workshops, exhibitions and fairs. Table 7 shows the events that have already attended and the planned ones up to now. The target of participations at events for the first period (month 1-21) is indicated in Table 4 of section 3.

4.10 Other activities

Finally, the partners will conduct internal presentations at their organisations to show the goals/progress of the project and will contribute to the project dissemination with communications in the media and in their day-to-day during visits with clients or meetings with other parties.

Table 5. Planned COCOP publications in scientific and trade journals

Journal/Magazine information				Paper information			
Journal Name	Type	Journal topics	Indexed (Yes/No)	Paper title	Paper topics	Partner coordinating the paper	Planned date
SIDENEWS	Trade	Steelmaking	No	Complex industrial process optimization	General presentation of the project focused on the steelmaking pilot case	TECNALIA	December 2016
Automaatioväylä	Trade	Process automation	No	COCOP – next generation plant-wide optimization	Overall introduction to the COCOP concept	VTT	February 2017
Empresa XXI	Trade	Industry	No	TBD	Innovation in the steelmaking processes	SIDENOR	End 2017
Journal of Cleaner Production	Scientific	Cleaner production and technical processes; Sustainable Development and Sustainability;	Yes	TBD	Review of sustainability BAT in metals production	VTT	End 2017
DYNA	Scientific	Industrial innovation, engineering & management	Yes	TBD	Mathematical modelling, software sensors	TECNALIA	Early 2018

Table 6. Planned COCOP presentations at conferences

Conference information				Presentation information		
Conference Name	Where/When	Scope	Type of audience	Type	Presentation topics	Partner coordinating the presentation
IABS 2017- Business and Society: from ambition to impact	Amsterdam June 2017	International	Researchers and practitioners	Paper/ Poster	Social innovation	TUDO
HICSS 51 - Hawaii International Conference on System Sciences 2018	Hawaii, USA January 2018	International	Researchers and practitioners	Paper	Gamification; information systems; industrial work	TUT
ESCAPE 28 - European Symposium on Computer Aided Process Engineering	Graz, Austria June 2018	European - International	Researchers and practitioners in field of CAPE (Computer Aided Process Engineering)	Paper	Modelling, optimization	VTT
INCOM 2018 - 16 th IFAC Symposium on Information Control Problems in Manufacturing	Bergamo (IT) June 2018	International	Researchers and practitioners	Paper	COCOP information system architecture	TUT
ECCE 2018 - European Conference on Cognitive Ergonomics	TBD Summer 2018	European- International	Researchers and practitioners in human-technology interaction and cognitive engineering	Paper	COCOP human factors	VTT

Table 7. Planned COCOP presentations at events (fairs, workshops,...)

Event information					Action information			
Event Name	Where/When	Scope	Type of audience	Size of audience	Presentation title	Presentation type	Presentation topics	Partner coordinating the presentation
VTT Co-creation Day	Finland Nov. 2016	National VTT Internal	VTT staff	Approx. 1500	COCOP - Next Generation Plant-Wide Control	Poster	COCOP project in general	VTT
Workshop for Process Industry Tackling the Future of Plant Operation	Germany Jan. 2017	European	Integrated automation & monitoring in industry	>150		Distribution of COCOP flyers	COCOP project in general	TUT
Automaatiopäivät22	Finland March 2017	National	Automation professionals from industry & academia	>200		Distribution of COCOP flyers	COCOP project in general	VTT
Impact workshop and SPIRE projects' conference	April 2017 (to be confirmed)	European	SPIRE Community	>200	COCOP presentation	Talk	COCOP project in general	TUT
2017 Process Industry Conference (SPIRE mid-term policy event)	September 2017	European	All relevant stakeholders for the European Process Industry	>150		Distribution of COCOP flyers	COCOP project in general	TUT

5 Conclusions

This report corresponds to the first release of the “Master Dissemination and Communication plan” for the COCOP project, and describes the key elements of the strategy that has been defined by the consortium for achieving proper project dissemination:

1. **the objectives** (*why*, mission & vision) → to spread the COCOP’s results to the largest possible concerned audience (at the national, European and international level) in order to promote the implementation and use of the project results (exploitation).
2. **the subjects** (*what* will be disseminated) → the COCOP project itself and its results together with the all the techniques/methodologies used for the project technical development.
3. **the timing** (*when* dissemination will take place) → three main phases are considered: 1) initial phase (*Awareness*) focused on increasing the project visibility and mobilising stakeholders and multipliers; 2) intermediate phase (*Interest/Desire*) focused on informing and engaging to the target stakeholders when preliminary results become available; 3) final phase (*Action*) focused on encouraging further exploitation of the COCOP outcomes (transfer to other industries, replicability,..).
4. **the target audience** (*to whom* it will be disseminated) → Industrial Community (Process industry & Process automation industry), Scientific Community, “Internal” Community (COCOP partners), EU projects working to similar domain, Standardisation bodies and Policy makers, Students and General public.
5. **the tools and channels** (*how* to reach the target audience) → web page, social networks, channels offered by the EC and SPIRE, dissemination material distribution, COCOP Special Interest Group creation and mainly the presentation of the COCOP results at scientific & trade journals, conferences, workshops, exhibitions and fairs. The report provides a list of potential journals, conferences and fairs where the COCOP results could be presented.
6. **the responsibilities** (*who* will perform the dissemination) → all partners of the consortium will contribute to the COCOP dissemination during the whole project lifetime
7. **the rules** for performing the dissemination activities
8. **the way to evaluate and assess the impact** of the dissemination activities, defining KPIs for the first period of the project

The report also includes a description of the actions foreseen for the first half of the project (month 1- month21). The main results of the activities performed until the writing of this report are:

- COCOP Logo and visual identity designed and used in dissemination material and tools
- COCOP Webpage implemented: www.cocop-spire.eu
- COCOP at social networks:
 - Twitter account: @CocopSpire
 - LinkedIn profile: COCOP
 - COCOP debate Group in LinkedIn: “COCOP: Process Industry Automation and Optimization”
- First set of dissemination material (1st flyer and COCOP general presentation) prepared and accessible from the website
- Preliminary presentation of the COCOP project in some trade journals and workshops

6 Annex I: Technological platforms and Associations with involvement of COCOP partners

Acronym	SPIRE	
Name	Sustainable Process Industry through Resource and Energy Efficiency	
Web	https://www.spire2030.eu/	
Profile	PPP of HORIZON 2020	
Domain	Process Industry	
Scope	European	
Partners involved & Type of involvement	BFI	WG Process, Partnership Board
	SIDENOR	Industrial member
	TECNALIA	Participant of the Steering Committee and all the working Groups (Feed, Process, Application, Waste)
	VTT	Participant of the Steering Committee and the Working Groups: Feed, Application and Horizontal

Acronym	FoF / EFFRA	
Name	FoF - Factories of the Future EFFRA - European Factories of the Future Research Association	
Web	https://ec.europa.eu/research/industrial_technologies/factories-of-the-future_en.html www.effra.eu	
Profile	FoF - PPP of H2020 EFFRA - Association representing the FoF PPP Private Side	
Domain	Advanced manufacturing	
Scope	European	
Partners involved & Type of involvement	TECNALIA	Member of the Advisory Group
	VTT	Member

Acronym	MANUFUTURE	
Name	Future Manufacturing Technologies	
Web	http://www.manufuture.org/	
Profile	European Technological platform	
Domain	Process Industry, advanced manufacturing	
Scope	European	
Partners involved & Type of involvement	TECNALIA	Member of the Steering Committee
	VTT	Member

Acronym	IFAC	
Name	International Federation for Automatic Control	
Web	http://www.ifac-control.org/	
Profile		
Domain	Automation	
Scope	World	
Partners involved & Type of involvement	BFI	Technical Committee “Automation in Mining, Mineral and Metal Processing (MMM)”. Reviewer, Conference Organisation
	TUT	Technical Committee “Linear Control Systems”

Acronym	SAS	
Name	Suomen Automaatioseura ry Finnish Society of Automation	
Web	https://www.automaatioseura.fi/	
Profile	Industrial association for automation professionals	
Domain	Automation (process, manufacturing etc.)	
Scope	National	
Partners involved &	VTT	Individual employees as members

Type of involvement	TUT	Individual employees as members
Acronym	OPC Foundation	
Name	OPC Foundation	
Web	https://opcfoundation.org	
Profile	Technological platform, industrial association	
Domain	Industrial automation, information exchange	
Scope	World	
Partners involved & Type of involvement	TUT	Member (End-User Membership)
	VTT	Member (Corporate Membership)
Acronym	DIMECC	
Name	Digital, Internet, Materials & Engineering Co-Creation	
Web	https://www.dimecc.com/	
Profile	PPP co-creation platform for digital transformations	
Domain	Process, manufacturing, etc.	
Scope	National	
Partners involved & Type of involvement	VTT	Shareholder
	TUT	Shareholder
Acronym	EUROSIM	
Name	Federation of European Simulation Societies	
Web	http://www.eurosim.info	
Profile	Forum for regional and national simulation societies to promote the advancement of modelling & simulation in industry, research & development	
Domain	Simulation in all domains	
Scope	European	

Partners involved & Type of involvement	VTT	Individual employees as members of national simulation society
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Acronym	EUROFER	
Name	The European Steel Association	
Web	www.eurofer.org	
Profile	Industrial Association	
Domain	Steel	
Scope	European	
Partners involved & Type of involvement	SIDENOR	Member

Acronym	ESTEP	
Name	European Steel Technological Platform	
Web	https://www.estep.eu	
Profile	Technological Platform	
Domain	Steel	
Scope	European	
Partners involved & Type of involvement	BFI	Support Group, WG Profit, WG Plant, WG I2m (Integrated Intelligent Manufacturing)
	TECNALIA	Working groups (Automotive, Environment)
	TUDO	Working Group People (Vice-Chairman)
	VTT	Working group Construction

Acronym	CEFIC	
Name	The European Chemical Industry Council	
Web	http://www.cefic.org/	
Profile	It has 3 distinct groups of members: Corporate (ACOM) - Federation (AFEM) and Business (ABM) and 3 types of partnerships: Associated Companies, Affiliated Associations and partners.	
Domain	Chemical Industry	

Scope	European	
Partners involved & Type of involvement	DSM	Member of the Executive Committee and Member of ACOM

7 Annex II: Dissemination reports

This annex collects the templates for the Dissemination reports of the different types of activities.

Publications in magazines/journals		
Journal information	Name of the Magazine/Journal	
	Journal/Magazine type	<i>(Scientific, Trade journal, General magazine,...)</i>
	Indexed	<i>Yes/No</i>
	Impact factor (and quartile)	<i>e.g. 2.35 (Q2)</i>
	Web	
Paper information	Paper title	
	Paper topics	
	Partner coordinating the paper	
	Other partners involved	
	Planned date	
	Status	
	Comments	
To be filled after publishing the paper	Bibliographic Citation	<i>Authors/Title/Journal/Date</i>
	DOI	<i>e.g. 123456/abc.1234.1.123 (preferably as a HTML link)</i>
	ISBN/ISSN	
	Release date	
	Date to be in “open access”	
	Link to the paper in “open access”	

National and International Conferences		
Event information	Name of event	
	Web	
	Organiser	
	When	
	Where	
	Scope	(National, European, World)
	Audience Profile	
	Target Audience Number	
Presentation information	Presentation title	
	Presentation topics	
	Presentation type	(paper/poster)
	Partner coordinating the activity	
	Other partners involved	
	Status	
	Comments	
To be filled after the conference	Bibliographic Citation	Authors/Title/Conference/Date
	DOI	e.g. 123456/abc.1234.1.123 (preferably as a HTML link)
	ISBN/ISSN	
	Link to the paper/poster, if feasible	
	Number of attendees	
	Picture of the event?	
	Any comment/feedback	

Event (Fairs, exhibitions, workshops,..)		
Event information	Name of event	
	Web	
	Organiser	
	When	
	Where	
	Scope	(National, European, World)
	Audience Profile	
	Target Audience Number	
Presentation information	Presentation type	(stand, poster, talk, ...)
	Presentation title	
	Presentation topics	
	Partner coordinating the activity	
	Other partners involved	
	Status	
	Comments	
To be filled after the event	Number of attendees	
	Picture of the event?	
	Any comment/feedback	

Dissemination in the media (radio, newspaper, TV,...)	
Media type	<i>(radio, newspaper, TV,...)</i>
Name of the media	
Scope	<i>(Local, national, European, World)</i>
Audience Profile	
Date	
Presentation title	
Objective of the dissemination	
Partner coordinating the activity	
Other partners involved	
Any comment/feedback	

Other Dissemination activity	
Type of activity	
When	
Where	
Scope	<i>(Local, national, European, World)</i>
Audience Profile	
Presentation title	
Objective of the dissemination	
Partner coordinating the activity	
Other partners involved	
Comments	

8 Annex III: First COCOP flyer

12 partners from 6 European countries (Finland, Sweden, Denmark, Germany, The Netherlands and Spain) covering several sectors of the industry: **steel, nutritional and materials products, automation technology providers, consultancy and software.**

General details

Project Start Date: 1st October 2016
 Project End Date: 31st March 2020
 Project duration: 42 months
 Grant Agreement n.: 723661
 Subprogramme area: SPIRE-02-2016, H2020-IND-CE-2016-17
 Web page: www.cocop-spire.eu
 @CocopSpire

Contact Information

Project coordinator:
 Prof. Matti VILKKO (matti.vilkk@tut.fi)
 Department of Automation
 Science and Engineering
 Tampere University of Technology
 Finland

The vision:

Complex process industry plants will be optimally run by the operators with the guidance of a coordinating, real-time optimisation system

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 723661

Need

Process industry faces a strong need to increase **product quality** and reduce **operating costs & environmental footprint**. A complex plant comprises continuous and/or batch unit processes. The plant's complexity stems from its dynamic properties, so a **plant-wide monitoring and control** is a requirement for achieving economically and environmentally efficient operation.

Objective

To achieve plant-wide monitoring and control by using the **model-based, predictive, coordinating optimisation concept** in integration with local control systems.

Beneficiaries

The companies who can benefit from the COCOP's results are:

- **Process Industry:** Iron & Steel, Copper, Chemical, Water treatment, Cement, Glass, ...
- **Automation solution suppliers**

Benefits

- **Reduced operation costs**
- **Increased sustainability (reduced energy and resource consumption and decreased greenhouse gas emissions)**
- **Improved working conditions** of plant operators by the new process control tools which support the operating work.
- **Increased competitiveness** of the European process and automation industry.

COCOP is based on the **decomposition-coordination optimisation of the plant operations**: the overall problem is decomposed into unit-level sub-problems, so then the solutions of sub-problems are coordinated to plant-wide optimal schedule using high-level coordination. This will enable operators to understand the functioning of the plant as a whole, including the areas traditionally beyond their control, and take better decisions within their part of the process.

COCOP will combine the technological development with a **social innovation process** of co-creation and co-development for improving effectiveness and impact of the innovations and operator acceptance.

Pilot cases:

- **On-site application and validation at two plants:** copper and steel manufacturing process.
- **Transferability analysis** to other two sectors: **chemical & water treatment processing.**

Figure 7. First COCOP flyer (external pages on the top and internal pages at the bottom)