Initial ICOS Plan for Dissemination, Communication and Exploitation

Project Number: 101092562

Project Acronym: ICOS

Project Title: International Cooperation On Semiconductors

Due date: 30/06/2023

Submission date: 27/06/2023

		Title	Initial Plan for Dissemination, Communication and Exploitation		
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Deliverable Information

Project Title:	International Cooperation On Semiconductors (ICOS)
Project Number:	101092562
Deliverable Number:	D6_2
Responsible Partner:	SiNANO Institute
Work Package Number and Title:	WP6 "Networking, Communication and Dissemination"
Version:	V6
Revision Date:	

Type of deliverable: Report

Dissemination Level: Public

Revisions

Version #	Date	Type of Change	Lead Author
V1	05/06/2023	Initialization	Milena Boclé
V2	07/06/2023	Update of the 1st draft	Pascale Caulier
V3	07/06/2023	Updates	Francis Balestra
V4	15/06/2023	Additional Inputs from the WP leaders	Pascale Caulier
V5	20/06/2023	Final check	Francis Balestra
V6	26/06/2023	Finalisation	Pascale Caulier

Approvals

Name, Organisation	Role	Validation date
Pascale CAULIER, SINANO	WP6 Leader	26-06-2023
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Executive Summary

ICOS needs to achieve high visibility across Europe and at international level to have a meaningful impact. Therefore, the project establishes a plan with a detailed strategy fulfilling several goals:

- create awareness and raise visibility of the ICOS brand and its objectives,

- ensure that the project and its outputs are widely disseminated to the appropriate target audiences at appropriate time and with the appropriate methods,

- identify and encourage the participation of those who can contribute to the development, evaluation, and exploitation of project results

- gather feedback and inputs from the Electronics Components and Systems community beyond the members of the ICOS consortium.

In this document, we present an initial Communication, Dissemination and Exploitation Plan which will be further developed as the project will move forwards in time.

1 Overview

1.1 Purpose

The Communication, Dissemination and Exploitation plan is a key element of the ICOS project and will serve as a guideline for all communication, dissemination and exploitation activities planned in the project. This document will describe the project channels used to achieve its Communication, Dissemination and Exploitation goals, as well as the activities and audience target.

The goal of Communication activities is to ensure a good circulation of information and documents between all the parties involved, but also enhance the visibility of the project and the stakes it covers.

Dissemination activities are conducted with the aim to share the method and results of the ICOS project and its involved partners and make it understandable by all target audiences. It also should favour networking opportunities with European and non-European potential research partners, enhance possible projects and collaboration by making available the research works depending on the ICOS consortium and facilitating contacts between industrials, researchers and other relevant actors.

The finality of Exploitation activities is to use efficiently the results obtained through ICOS to favour the development of international cooperation in the field of semiconductors and give precise and relevant recommendations to the European policy

makers and European research actors in the field in order to strengthen Europe's position and independence on the international stage of the semiconductors value chain.

1.2 Responsibilities

The SiNANO Institute is the ICOS partner responsible for the coordination of Communication and Dissemination activities and is in charge of the elaboration and implementation of the Communication, Dissemination and Exploitation plan.

1.3 Definitions

Term	Definition
ICOS	International Cooperation On Semiconductors
Communication	Promote the project in an open way and cover its updates, create engagement with the public
Dissemination	Sharing methods and research results with potential users and peers, in a more technical way
Exploitation	Exploitation refers to the use of the output and results of the project for further development activities, policy making etc.
KPI	Key Performance indicators. KPIs are used as a target metrics to evaluate the success of an action.
WP	Work Package

2 Dissemination, Communication and Exploitation strategy

A coherent and efficient strategy forms the bases of the success of the project. Communication activities will mainly focus on sensibilizing the public audience to the current problematics in the field of semiconductors in Europe, the methods and objective of ICOS and the finality of the project itself. Dissemination will target more specific audience and encourage collaboration, networking and project development contributing to strengthening Europe's position in the field of semiconductors, by promoting the ICOS and partners works and results relevant for the project. The aim of the exploitation plan is to ensure the optimal use of the project's outcomes after its completion.

2.1 Strategy

The dissemination efforts focus on the promotion of project outcomes in order to attract professional and expert audiences, raise their awareness and engage them in project activities, particularly in the workshops and events.

The Communication and Dissemination plan focuses on various targets, reached through different engagement modes or communication/dissemination channels.

Messages must be tailored to the identified target groups and distributed through appropriate media (communication channels) at the right time.

Five target groups have been initially identified which require different modes of engagement.

Target Groups	Mode of engagement
Academics, Researchers, other linked Projects/ Initiatives	Direct contacts through ICOS partners, participation in joint initiatives (e.g. IRDS, IPSR-I,…), category associations (AENEAS, EPoSS,…), meetings with other initiatives (MCSA, StandICT, other CSA's).
Industry associations	ICOS partners are already involved in main associations, also with prominent roles (e.g., AENEAS, EPoSS, ePIXfab, Inside,…).
Industry decision makers	Direct contacts through industrial ICOS partners, and their presence in associations like AENEAS, EPoSS, INSIDE, ESIA and SEMI EU.
Policy Bodies, Standards Associations, EC, National Authorities, Funding Agencies	Direct links of partners with respective Public Authorities and with Commission bodies. Organization of specific events. Planned contacts with the European Semiconductor Board of the European Chips act. Links through the Governing Board of KDT JU. Coordination with standard definition bodies in topics like critical materials, RISC-V, ISO standards for safety, advanced packaging.
General Public	Use of social media channels, website, Preparation of dissemination material for general public. Press releases. National events.

Outputs to be disseminated (with different levels of confidentiality):

- ICOS Digital Platform

- EU and international ecosystems mapping

- Recommendations on technical topics and cooperation

- Matching EU and International Strengths and Gaps

The Exploitation plan focuses on the optimal use of the project's results .

ICOS will take profit of other scientific meetings of the semiconductor supply chain, like Smart Systems Integration, ESSDERC, EPoSS Forum, IRDS and IPSR-I meetings, to which will be participating, to promote the ICOS project and results.

2.2   Project Identity and public image

ICOS must be recognizable at a glance and must have its own identity.

For this purpose, several tools or elements were created:

- A logo was designed, together with graphical guidelines (dominating colours, text font and semiconductor-based atmosphere). The logo is included in all materials connected to ICOS (deliverables, press releases, flyers, posters…)
- The project website (described in deliverable 6.1) was set up, as the main platform for communication and dissemination activities.
- The project relevant social networks were also set up: a LinkedIn account and a Twitter account are now actively used for the communication and dissemination activities.
- Standard templates for slides and text documents which shall be used by all the partners for deliverables, reports but also oral or written presentations made at conferences.

2.3   Communication / Dissemination activities

2.3.1   Initial press release & ICOS Kick Off meeting

Launch of ICOS in January 2023 in Brussels.

The Kick-Off meeting gathered the ICOS consortium, the project officer and some of the Industrial and International Boards members.

This event was followed by a first official press release explaining the context and objective of the ICOS project and presenting all the partners involved. The press release can be found on the [ICOS website](#).

2.3.2 ICOS Website

The website was set up and published online in the first 3 months of the project. It is accessible at this address: https://icos-semiconductors.eu

The URL was specifically chosen, adding an extra keyword to avoid any confusion with any other existing "ICOS" institutions.

The website works as a platform for both communication and dissemination activities. It includes:

- an open access area that describes the project, the project history, partners, context, objectives, implementation methods, results...It is completed with regularly updated tabs with news, press releases and upcoming events.
- a password protected private are, with different access level for Consortium Members, Industrial or International Advisory Boards, European Commission Reviewers.

This part of the website is used as a hub for internal project management, for example restricted-document publishing and exchanging, with a reinforced security level.

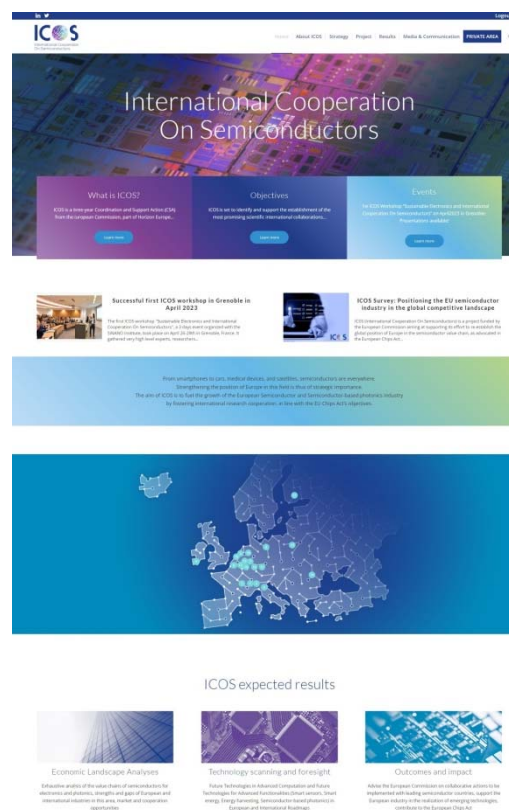More details on the website structure can be found in the deliverable 6.1.

Figure 1 - The landing page of the website

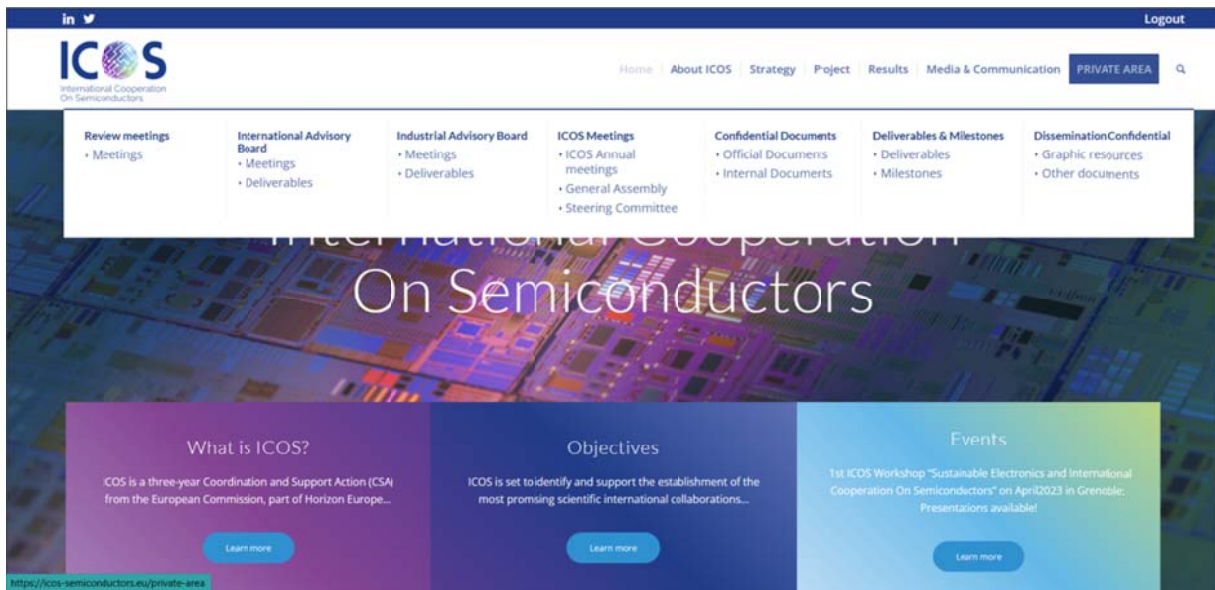|	Title	Initial Plan for Dissemination, Communication and Exploitation		
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Figure 2 - The private area tabs as seen by a member of the Consortium

2.3.3   Joint Workshop with the SiNANO Institute

On April 26 to 28th 2023, ICOS organized a joint workshop on *"Sustainable Electronics and International Cooperation On Semiconductors"* with the SiNANO Institute. This joint event took place in Grenoble and gathered leading experts in the field of nanotechnologies and semiconductors, as well as representatives from the European Commission and European Innovation Council. An audience of 120 participants attended the event over the 3 days.

Figure 3 - One of the workshop advertisments

The workshop was dedicated to three main topics:

- **The European Innovation Council:** the EIC representatives and local actors supporting the EIC introduced the EISMEA programmes and helps, whereas local start-ups engaged with the audience to present their story.
- **Sustainable electronics:** this part of the workshop, also including a panel session, aimed at discussing the current environmental or climate-crisis related issues both in the manufacturing and use of electronics.
- **Technology scanning and foresight:** a more technical part dedicated to the current and future technologies, talks about CMOS, Beyond CMOS, More Moore, More than Moore, but also photonics and quantum computing. A special session was organized with speakers from Japan and the EC to discuss the collaboration with Japan and the Japanese semiconductors views.

All the presentations made during the event are available in open access on the ICOS website: https://icos-semiconductors.eu/workshop-sustainable-electronics-international-cooperation-on-semiconductors/

The workshop permitted not only to get very fruitful talks and discussions and put the basis for potential future collaboration, but it also served as a good communication tool, with well positioned posters and flyers. The flyers were distributed to a wider audience of technology and engineering students, who showed a real interest in the project.

2.4   Project presentation

2.4.1   Project description

A general presentation of the ICOS project can be found on the website both on the homepage and the "About ICOS" page.

2.4.2   Press releases

ICOS will publish press release after the completion of each major milestones of the project and for each worthy and successful collaboration.

2.4.3   Surveys

The project makes use of survey as part of its methodology to get feedback on specific activities (for documents or workshop). These surveys respect the data protection requirements. They are distributed throughout ICOS channels and partners.

Figure 4 - An example of a survey launched at the start of the project

2.4.4 Flyer

An initial flyer was designed to briefly present the ICOS project and involved partners. A more specific flyer could be designed, as the project will advance, to reach different target groups and contribute both to communication and dissemination goals.

Figure 5 - The ICOS general flyer

2.4.5 Posters

Posters presenting ICOS and the involved partners were created already at the very beginning of the project and used for the very first public event of ICOS, the workshop in April 2023. The posters are and will be used at each opportunity (workshop, booth), as they are an efficient way to convey information about the project and trigger interest in meeting attendees.

Both posters are available on the ICOS website for download.

Figure 6 - the ICOS posters

2.4.6 Newsletters

Two editions of the ICOS newsletter are planned. Its content will inform on the development of the ICOS project and outputs (updates, events...) as well as present some extra insights on the European or International semiconductor ecosystems.

The newsletter will be available on the website and distributed by the ICOS members and partners. It will also be widely disseminated on social networks.

2.4.7 Social Network profiles

In order to conduct an effective communication and dissemination strategy, profiles were created on two social Medias LinkedIn and Twitter.

- LinkedIn is mainly dedicated to an audience of researchers, scientists, technical workers, a public with interest for semiconductors or interested by the questions raised by the EU chips act and EU policies linked to the improvement of the semiconductors situation in Europe. It is based on slow communication, with a few publications a week being more than enough to satisfy the algorithm and reach a broader audience.

- Twitter on the other hand finds itself useful to cover live events or communicate to a broader audience using popular hashtags. The messages are much shorter than on LinkedIn and more dynamic in the way it is used.

ICOS chose to use both platforms to reach a wider audience (targeted and general public) and have the possibility to engage with interested users both on a direct and dynamic way and on a more slow-paced basis.

These platforms get ICOS connected with leading institutions and experts in the field of semiconductors and nanotechnologies. ICOS publishes regularly, in order to maintain a link with its audience and grow its base of followers.

The publications can be generic posts about ICOS (presenting the project or the context), posts relative to ICOS events (announcements, open access for presentations, event coverage) or ICOS updates (news, partner updates relevant for the project…). ICOS reports will be widely advertised there.

Media analytics are constantly monitored in order to update our strategy and content accordingly.

- **ICOS on LinkedIn**

The ICOS project LinkedIn page can be found here:
https://www.linkedin.com/company/icos-international-cooperation-on-semiconductors/

At the beginning of June 2023, ICOS counts **284 followers**, mainly from:
- Research services (25%),
- Semiconductor/electrical/Electronics Manufacturing (17%),
- Higher Education (14%).

The posts are often reshared by the partners or, when it comes to presentations, by the speakers, which contributes to an effective circulation of the information and helps to reach new potential followers.

Figure 7 - The ICOS page on LinkedIn

- **ICOS on Twitter**

In early June, ICOS has **19 followers** on Twitter, most of them being academics or partner institutions.

Figure 8 - ICOS page on Twitter

2.5 KPI monitoring

It is important to set realistic and achievable target numbers and build follow-up habits, in order to assess the efficiency of our strategy, both for communication and dissemination activities.

2.5.1 KPIs tables

Dissemination/Communication Tools/Channels	Description of Activities	KPIs
Website	N° of monthly visits	300
	Duration	2,5mn
Social Media (LinkedIn)	Followers per year/ likes per post/ impression per post	200/ 10/ 300
Social Media (Twitter)	Followers per year/ likes per post/ impression per post	50/2/100
Press Releases	3: Initial, Intermediate, Final	3
E-Newsletters	Number, No. of downloads viewed per issue	2, >30%
Links with other initiatives	N. of meetings with other EU CSA's in semiconductors	6
Surveys	N° of EU stakeholders	120
	N° of multipliers addressed	20

Table 1 - Dissemination & Communication channels and KPIs

The following tables summarize the dissemination and communication events of the project using these project outputs and the associated KPIs:

ICOS EXTERNAL Events	Lead	Participants	KPIs (N.)
Workshop with the EC and selected EU stakeholders	WP4	EC/ Selected EU stakeholders	2
Workshop with European stakeholders	WP5	European stakeholders	3
Strategic Workshops with the EC	WP5	EC	2
Workshop on standardization needs	WP5	EU and International experts European stakeholders (StandICT)	2
International WS with US, Japan, Korea, Taiwan…	WP6	International	2

			experts/stakeholders	
WS with Board (Consortium + ABs) Presentation of the key findings of WP2 (D2.1 and D2.2).	WP2	ICOS Boards Industrial.& International AB's		2
Virtual meetings one for each of the Tasks 3.1 and T3.2	WP3	EU Scientific experts		2
Workshops with other European initiatives. Presentation of the key findings of WP2 (D2.3).	WP2/ WP3	Experts from other Horizon Europe projects		4
Physical meeting joint between T3.1, T3.2 and T3.3	WP3	EU Scientific experts		1
Interim Dissemination event: Presentation of preliminary ICOS results & Recommendations		EC, European stakeholders		1
Live WS & matchmaking event (with non-EU Research Institutions)	WP6	International experts		3
Final dissemination event/ Policy Workshop	WP6	EC, European stakeholders		1

Table 2 - Dissemination Channels

Dissemination Tools/ Channels	Lead	Schedule	KPIs
Workshops (WS) with external participants	WP 2,3,4,5,6	see table above	20
European Commission events	WP4 - WP5	M9, M27, M34	5
ICOS booths at selected events	WP6	1 per year	3
White Papers	WP4	M15	1

Table 3 - ICOS External events and KPIs

2.5.2 Follow-up on KPIs

In order to evaluate the impact of the communication and dissemination strategy and recalibrate it, if necessary, KPIs should be monitored regularly. The consortium plans to have a reporting on the numbers and internal documents to follow up on all events and numbers on a regular basis.

In the tracking documentation, it will be indicated by arrows and colors how KPIs were met (an upper green arrow indicates that the target numbers are fully met, a blue still arrow indicates a neutral result, whereas a red arrow pointing down indicates that KPI are not met or may risk to not be fulfilled.)

2.6 Planned Communication/Dissemination activities

2.6.1 Presentations at conferences

ICOS partners will attend conferences and workshop in the field of semiconductors and nanotechnology and will use these opportunities to introduce the ICOS project to a receptive audience and engage directly.

2.6.2 Invited lectures and Talks

Lectures or talks conducted by ICOS partners on the semiconductor value chain and/or relevant topics (skills shortage, EU chips act…) are excellent for the visibility of ICOS, as they provide a direct excerpt of the project and give the possibility to the audience to engage directly with a member of ICOS.

2.6.3 Booth at conferences/events

Booths are a great opportunity to bring visibility to the project and dynamize networking with interested audiences. ICOS plans to have booths at various international events, in particular at EC related events, and industrial events, to target a more specific audience. A booth usually comprises of a visual presentation and/or a poster/roll-up and flyers to introduce the project and incite to engage with the partners holding the booth.

2.6.4 Workshops

One workshop already took place in Grenoble in late April 2023, to highlight: i) important topics in the international roadmaps for the main EU applications, ii) European activities in Industry, RTO and Academia, iii) Strategies in EU and leading semiconductor countries (US, Japan), iv) Challenges and possible solutions for sustainable electronics.

Another workshop will take place in the framework of the ESSDERC-ESSCIRC2023 conference in Lisbon, on September 11th. This second workshop *European Strengths and Gaps in Emerging Semiconductors Technologies*" will gather leading experts from ICOS partners to discuss the main international and European activities & Technologies, Semiconductor ecosystems, Advanced computations, Smart sensors, Smart Energy, Energy Harvesting and Semiconductor-based photonics.

ICOS also invites the community to its own events: conceptual work and preliminary results will be openly discussed at an interim workshop in M21 (MS5). An Open Final Dissemination Event presenting the final ICOS results and recommendations is planned to be organized in M36 (MS6). To mutually benefit from the presence of speakers and

limit travel efforts, we strive to organise such events as satellites of EU & International Events and conferences. For example, EFECS, which is the main international forum of the Electronic Components and Systems value chain in Europe, organized by AENEAS, EPoSS and Inside in association with the Commission and the EUREKA program, or its successor in line with the EU Chips Act, presents the best opportunity to combine a wide dissemination action with workshops targeting specific EU stakeholders, for example with other CSA's related to semiconductor technology, digital applications and supply chain.

Whenever possible, workshops involving EU members make use of teleconferencing to avoid travel expenses and to reduce pollution. Target audience is in the range of 30-50 attendees.

2.7   Exploitation

The objective of the exploitation activities in ICOS is to ensure that the outcomes of the actions conducted in this project are further used by a range of people, including the scientific community, industry, policymakers, European Commission and governmental authorities.

Within ICOS project we plan 3 levels of exploitation measures.

 - Level 1: Exploitation within the consortium

Strong presence of Academia, RTOs, large Industrial Partners and Industry Associations in the Consortium.

All the results of WP2 (D2.1, D2.2 and D2.3) will be shared to the consortium within the course of WP2 in the form of reports and presentations (ppt) in order to collect comments, feedbacks, and improvements of the results.

The outputs of the WP3 will be exploited in the WP4.

- Level 2: Exploitation with Policymakers: EU and International

 Recommendations to Policymakers (EC, Members States, Funding Agencies) in coordination with Industry Associations like AENEAS, INSIDE, EPoSS, ESIA, SEMI EU, and other ETP's, covering joint actions with leading semiconductors countries and standardization needs.

Exploitation by international public authorities for bilateral or multilateral cooperation with EU member states and the EC.

A workshop dedicated to policy makers will be organised in the last month of the project.

All the results of the Workpackage devoted to the Economic Landscape Analysis will be shared with policy makers in the form of reports and presentations especially the Economic analysis of the EU and international semiconductor ecosystem and the past and existing EU-International cooperation with the Consortium and International Institutions.

- Level 3: Exploitation with Research and Industry: EU and International

The Strengths identified in the Workpackage devoted to Technology scanning & foresight and the emerging promising Future technologies will be exploited by the Research Community.

Exploitation by EU and International researchers for developing international cooperation, in the form of possible joint projects between partners and leading international Institutions, cooperation visits, exchange or researchers, joint Laboratories, joint roadmap efforts, to strengthen European expertise and technology in the field of semiconductors on topics of mutual interest.

The results of the Workpackage devoted to the Cooperation Framework can be exploited in two ways.

The first public document, which is the *White paper on international cooperation in the semiconductor field*, may provide guidelines and methodologies to any stakeholder in the semiconductor field to prepare initiatives for cooperation in this field and to make sure that key considerations are taken into account.

The non-public deliverables on *Cooperation cases on Advanced Computation, Cooperation cases on Advanced Functionality* as well as on *Priorities for cooperation* may help selected stakeholders to prepare specific cooperations.

This will obviously happen as part of ICOS in the Workpackage devoted to Foundation to International Cooperation, but it can also happen on a much broader scale by selected third party stakeholders.

The results can also be exploited by the Industrial and International Advisory Boards and other European initiatives in the framework of joint events and Workshops.

The several ICOS Public deliverables will be exploited by the Stakeholders Community.

As we move to the end of the project, this part of the plan will be updated accordingly.