



INSHIP

EUROPEAN COMMON
RESEARCH AND INNOVATION AGENDA



Horizon 2020
European Union funding
for Research & Innovation



Advanced Networking



PSA-CIEMAT

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Madrid (Spain)

WP Number:

WP 8

WP Name:

Advanced Networking

Person months (national + EC):

81,8

WP leader:

CIEMAT

Partners:

Fraunhofer, INTEC, FBK, UEVORA, CRES, CEA, METU, EERA, Cyl + All ARPs

Objectives:

To lay strong foundations for **long-lasting future cooperation** within **SHIP R&D community** (involving the large majority of existing research capabilities in Europe) and with the **Industry** and **policy makers**, by carrying out the following Tasks:

- Analyze **existing innovation strategies** across Europe and propose a **Roadmap**
- Study **current socio-economic impact** / Analyze other alternative scenarios
- To create the needed pillars to **translate the developed foreground to the Industry**

WP8 – Tasks and related deliverables

| No. | Title | Responsible beneficiary | Due/Expected |
|-------|---|-------------------------|--------------|
| D 8.1 | Report on analysis of needed national and regional innovation strategies on SHIP | Fraunhofer | Done |
| D 8.2 | Report on assessment of socio-economic impact scenarios of SHIP in Europe | AEE-INTEC | 24/32 |
| D 8.3 | Report on comparative analysis and innovation support roadmaps in Europe with regard to SHIP | CIEMAT | 36 |
| D 8.4 | Report on guidelines of relationship between industry and European SHIP research cluster | CIEMAT | 46 |

Task 8.1 “Analysis of needed national and regional innovation strategies on SHIP”

Task leader: Fraunhofer / Responsible: Pedro Horta (FISE)

Partners: CIEMAT, AEE-INTEC, FBK, UEVORA, CYI, CRES, METU

Duration: 18 months

Objectives:

- To **collect and analyse the existing innovation strategies at national or regional level** with regard to SHIP R&D.
- Identify **key stakeholders** at regional/national levels.
- In the light of the results of this analysis, to outline **a suitable joint European strategy**.

Review of existing initiatives on National Innovation Strategies

CURRENT STATUS

- Questionnaire to collect data about existing regional innovation strategies (MS30) was distributed and results collected.
- Apart from the questionnaire, data has been taken from:
 - ✓ National Concept Notes,
 - ✓ periodic reports on innovation in Europe published by the European Commission and,
 - ✓ existing **RIS3** strategies
- Final D8.1 contents were presented and discussed at **INSHIP European Workshop, 21.02.2019, Brussels.**

- D8.1 is finished: ***'Report on analysis of needed national and regional innovation strategies on SHIP'***

Descargable en: <https://www.inship.eu/results/deliverables>

RIS3: Public investment priorities for innovation

The screenshot shows a web browser window displaying the 'Eye@RIS3 - Smart Specialisation Platform'. The browser's address bar shows the URL 's3platform.jrc.ec.europa.eu/map'. The website header includes the European Commission logo and the title 'SMART SPECIALISATION PLATFORM'. Below the header is a navigation menu with options like 'Home', 'S3 Platform', 'Sections', 'Tools', 'News', 'Events', and 'Knowledge Repository'. A search bar is located on the right side of the navigation menu.

Eye@RIS3: Innovation Priorities in Europe

Eye@RIS3 visualises public investment priorities for innovation across Europe. It enables public managers and stakeholders to position their territory in comparison to other territories and to find potential partners for collaboration. Inside the EU, priorities are linked to the use of the European Regional and Development Funds (ERDF). Data are based on the information found in Smart Specialisation Strategies and related strategic frameworks. Outside the EU, they depict R&I priorities reported in various government strategy documents.

To allow for easy comparisons with established classifications, priorities are classified using the [Statistical Classification of Economic Activities in the European Community \(NACE rev. 2\)](#) and the [Nomenclature for the Analysis and Comparison of Scientific Programmes and Budgets \(NABS 2007\)](#).

Last updates: The tool has been fully upgraded in September 2018. Data are continuously updated based on inputs from European regional and national authorities and their stakeholders (also called the "entrepreneurial discovery process" in the literature on smart specialisation).

[More information](#)

Title/Description of Priority

Territorial Level
None selected

[Refine your search](#)

SEARCH **Reset**

Click on the following link if you want to propose or edit priorities.

Approach:

- “**Innovation Union**” flagship initiative → **smart specialisation** as a way to enhance Europe's capacity to **deliver smart, sustainable and inclusive growth**
- **Research and innovation strategies for smart specialisation (RIS3)** →

Place-based economic transformation agendas fulfilling:

- to focus **policy support** and investments on key national/regional priorities for knowledge-based development;
- built upon local strengths, **competitive advantages** and potential for excellence;
- to support technological as well as **practice-based innovation** and aim to stimulate private sector investment;

Deliverable 8.1: An Example

Parameter assessment criteria

Assessment of the current status in the “SHIP related RIS3s” parameter is based on the range of frequencies verified. As of the observed results, in tab.3.2, a “status classification” criteria was defined as:

- Green (good): > 10 RIS3s;
- Yellow (reasonable): 5 <= mentions <= 10;
- Red (bad): < 5 mentions.

| | | | | | | | | | | | |
|----------------|---------------------------|--------|-----|-------|--------|-----|-------|-----|--------|-----|-----|
| Objective | Policy Support | | | | | | | | | | |
| Parameter | SHIP in policy objectives | | | | | | | | | | |
| Country | AT | BE | CY | FR | DE | HE | IT | PT | SP | TK | UK |
| Nr. RIS3s | 5 | 5 | 0 | 27 | 8 | 4 | 14 | 2 | 8 | 0 | 0 |
| Classification | Yellow | Yellow | Red | Green | Yellow | Red | Green | Red | Yellow | Red | Red |

Example: *Policy Support* assessment

- Overall RIS3 objective parameters assessment

| Objective | Policy Support | | | | | | | | | |
|---------------------------|----------------|-------|-----|--------|--------|-------|--------|--------|--------|-----|
| | AT | CH | CY | FR | DE | GR | IT | PT | SP | TK |
| SHIP in policy objectives | Red | White | Red | Yellow | Yellow | Green | Green | Red | Green | Red |
| SHIP R&D incentives | Yellow | Red | Red | Yellow | Green | Red | Yellow | Red | Yellow | Red |
| SHIP market incentives | Green | Red | Red | Yellow | Green | Red | Yellow | Yellow | Green | Red |
| SHIP related RIS3s | Yellow | White | Red | Green | Yellow | Red | Green | Red | Yellow | Red |
| Classification | Yellow | White | Red | Yellow | Green | Red | Yellow | Red | Green | Red |

* information is not readily available for CH

Deliverable 8.1: Assessment and Recommendations

- Assessment and classification w.r.t. the **three main objectives: Policy Support, Competitive Advantage & Practice-based Innovation**

- **SUMMARY**

| Country | AT | CH | CY | FR | DE | GR | IT | PT | SP | TK |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Policy Support | Yellow | Red | Red | Yellow | Green | Red | Green | Red | Green | Red |
| Competitive advantage | Green | Yellow | Green | Yellow | Yellow | Yellow | Yellow | Yellow | Yellow | Yellow |
| Practice based innovation | Green | Green | Yellow | Green | Green | Yellow | Yellow | Red | Yellow | Red |
| Classification | Green | Yellow | Yellow | Yellow | Green | Yellow | Yellow | Red | Yellow | Red |

- **Broad variation of positioning w.r.t. main objectives**, as well in detailed aspects (not shown here – every main objective having 3-5 aspects / sub-objectives)
- **Use “good practice” examples** with good positioning to adapt to, while respecting different boundary conditions in different countries;
- **Use “poor positioning” to identify gaps** and motivate improvements

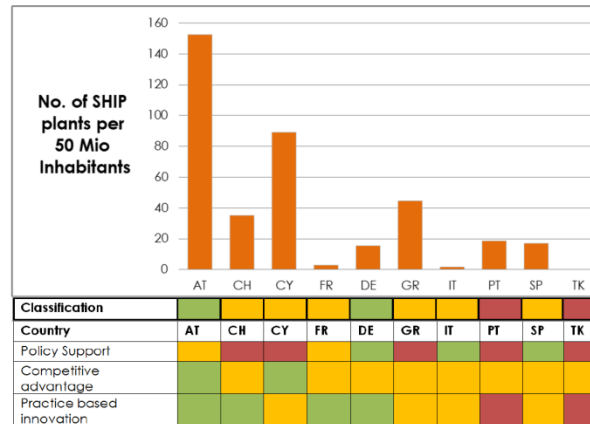
Deliverable 8.1: Assessment and Recommendations

- Comparison of positioning and “success” of SHIP implementation so far



Deliverable 8.1: Assessment and Recommendations

- Comparison of positioning and “success” of SHIP implementation so far



- Obviously, many other factors influence the ‘success’ of SHIP implementation
- Moderate correlation between ‘innovation positioning’ and ‘success’
- Not any single criterion decisive for ‘success’ of SHIP implementation, therefore:

SHIP may become a national/regional priority everywhere!

Deliverable 8.1: Assessment and Recommendations

| Country | AT | CH | CY | FR | DE | GR | IT | PT | SP | TK |
|---------------------------|--------|-------|--------|--------|--------|--------|--------|--------|--------|-------|
| Policy Support | Yellow | White | Red | Yellow | Green | Red | Yellow | Red | Green | Red |
| Competitive advantage | Green | White | Green | Yellow | Yellow | Yellow | Yellow | Yellow | Yellow | White |
| Practice based innovation | Green | White | Yellow | Green | Green | Yellow | Yellow | Red | Yellow | White |
| Classification | Green | White | Yellow | Yellow | Green | Yellow | Yellow | Red | Yellow | White |

- Countries with better conditions to fulfill a SHIP-oriented RIS3 present poorer solar resource conditions
- National based strategies (Policy Support) farther from good framework conditions in Southern countries
- Go for **trans-national strategies** enabling matchmaking of complementary conditions (e.g. Solar industry in central Europe having access to improved market access conditions in Southern Europe)

Definition of a 'RIS3-like' Roadmap:

- Step 1: Regional contexts and potential for innovations need to be analysed
- Step 4: Identification of a limited number of research and innovation priorities, where the region has a realistic chance to progress
- As an example:
 - ➔ **national/regional analysis** of SHIP potentials and related target industries, as e.g. done in Spain (2016 study of *Solar Concentra/SOLATOM*) with a very high spatial resolution of municipality level
- Seek for synergies

| Objective | Competitive advantage | | | | | | | | | |
|-----------------------|-----------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| | AT | CH | CY | FR | DE | GR | IT | PT | SP | TK |
| Solar resource | Red | Red | Green | Yellow | Red | Yellow | Yellow | Green | Green | Green |
| End-user market | Yellow | Red | Red | Yellow | Yellow | Yellow | Yellow | Red | Red | Red |
| Scientific know-how | Green | White | White | Green | Green | Green | Green | Green | Green | White |
| Solar industry | Green | White | Yellow | Red | Red | Red | Red | Red | Yellow | Yellow |
| SHIP visibility | Green | White | Green | Red | Red | Green | Red | Red | Yellow | Yellow |
| Classification | Green | White | Green | Yellow | Yellow | Yellow | Yellow | Yellow | Yellow | White |

Task 8.2 “Analysis of socio-economic impact scenarios of SHIP development in EU”

WP leader: AEE-INTEC / Responsible: Jürgen Fluch/Elena Guillén

Partners: Fraunhofer, CIEMAT, CYI, CRES

Duration: 24 months

Objectives:

- Stabilising current socio-economic impact of SHIP development and deployment in Europe
- Different socio-economic scenarios will be analysed considering the European SHIP strategy outlined in previous Task.

D8.2: Assessment of possible scenarios and its potential socio-economic impact from current status of SHIP deployment

Data sources and outputs

Statistics:

- Eurostat
- SolarHeatWorldwide
- REN 21



- Energy Demand of Industry - Potential for solar process heat
- Installed kW and m²
- Green jobs

Site specific data:

- SHIP database (INTEC)
- Solar Thermal World



- € installed sites
- Installed kW and m²
- Subsidized heat source
- Origin of collector – regional value

Desktop research:

- Subsidies
- Energy costs
- Taxes



- Efforts on subsidies
- € substituted heat source
- Taxes - national incomes to state budget

Task 8.3 “Interaction models between research actors and key stakeholders on SHIP technologies & applications”

WP leader: CIEMAT

Partners: Fraunhofer, AEE-INTEC, FBK, UEVORA, CYI, CRES

Duration: 34 months

Objectives:

- To **establish/enhance links between innovation actors and stakeholders within EU**, relying on outcomes of Tasks 8.1, 8.2 & 7.3
- To develop **a comparative analysis and a Roadmap** (based on the scenarios analyzed in Task 8.2) **to support innovation at European level.**
- **Policy and program-level suggestions** will be proposed to advance on European research clustering around SHIP technologies.

Task 8.4 “Joint framework for collaboration with industry”

WP leader: CIEMAT

Partners: Fraunhofer, AEE-INTEC, UEVORA, CYI, CRES, CEA, METU, EERA

Duration: 43 months

Objectives:

- To **foster the collaboration between R&D and industrial organizations**, through:
 - ✓ Establish **information channels** with national professional bodies.
 - ✓ Participation in **national industrial conferences to inform about INSHIP**
 - ✓ Organization of **Workshops at national level** to communicate our results.

WP8 Task 8.4 Presentations in 'Industrial' Conferences

- Main goal is to **communicate the INSHIP outcomes to the SHIP Industry** (in addition to the contacts with NSh Groups to be made within WP7)
- Overall targets are:
 - ✓ To strengthen links with the European Industry;
 - ✓ to present this consortium, and;
 - ✓ to inform about our deliverables
- Main Task 8.4 deliverable (*Guidelines of relationship between industry and European SHIP research cluster*) to be submitted in 2020 , but until then, expected activities are:
 - ✓ Delivery of **presentations* about INSHIP in industrial events and conferences**. No need to plan, but to **report & record**.
 - ✓ **Every partner to organize a Workshop (WP7) in a national industry event** (,national workshop recommendation slides')

Presentation on Advanced Networking

Muchas gracias por su atención!!