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)

WP8 - summary

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, CyI + 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**

WP8 – Task 8.1

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

Status of Deliverable 8.1

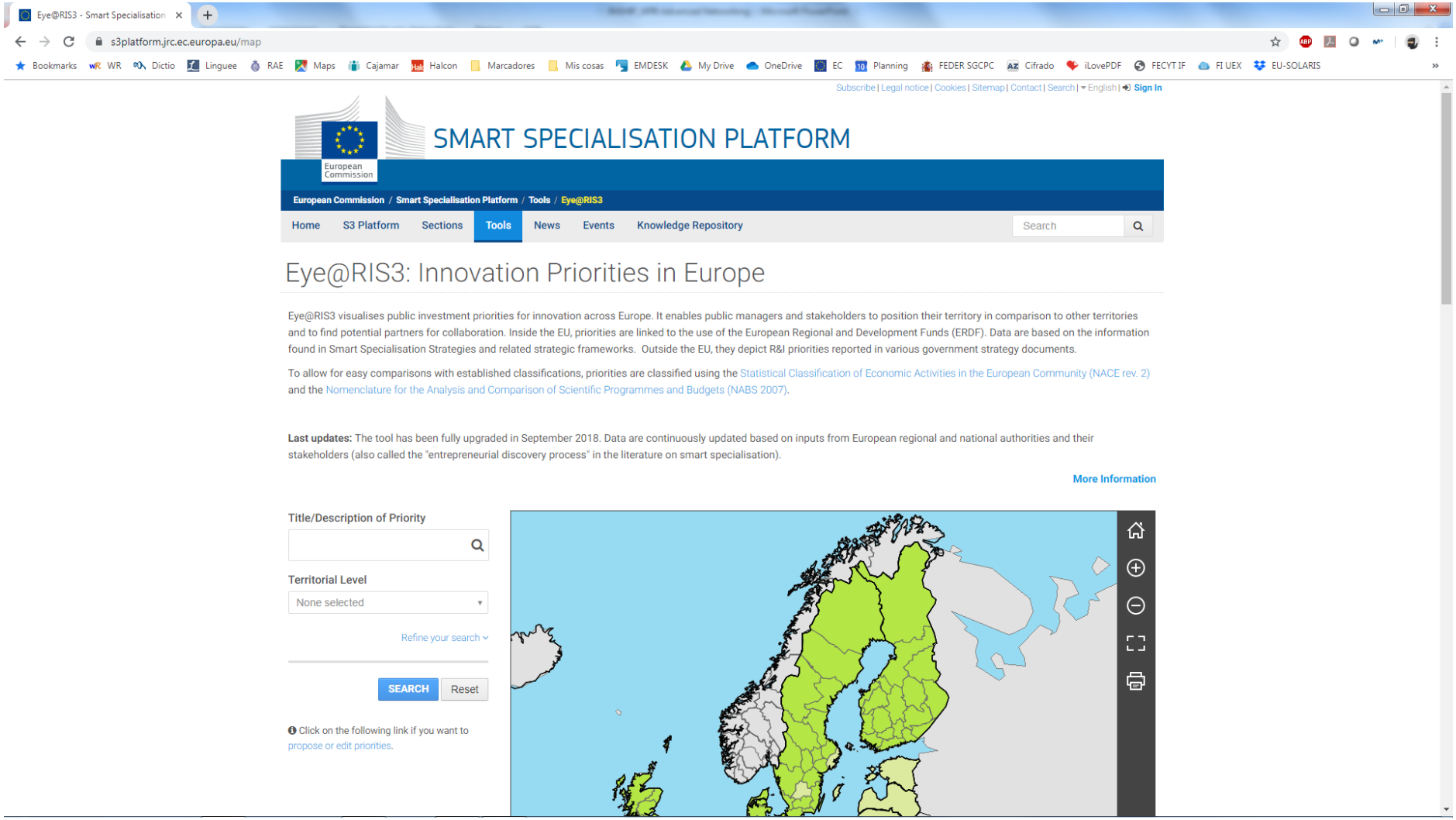
CURRENT STATUS

- 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



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 RISS3s;

-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											

Example: *Policy Support* assessment

- Overall RIS3 objective parameters assessment

Objective	Policy Support									
Country	AT	CH	CY	FR	DE	GR	IT	PT	SP	TK
SHIP in policy objectives										
SHIP R&D incentives										
SHIP market incentives										
SHIP related RIS3s										
Classification										

* information is not readily available for CH

Deliverable 8.1: Assessment and Recommendations

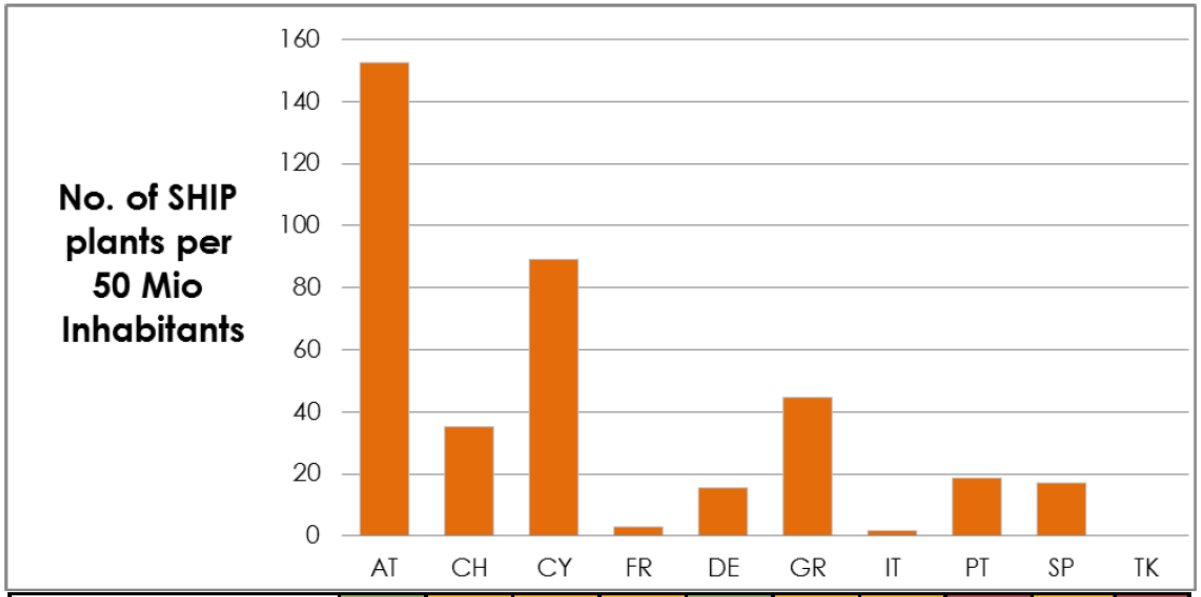
- Assessment and classification w.r.t. the **three main objectives: Policy Support, Competitive Advantage & Practice-based Innovation**
- **SUMMARY**

Country	AT	CH	CY	FR	DE	GR	IT	PT	SP	TK
Policy Support										
Competitive advantage										
Practice based innovation										
Classification										

- **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

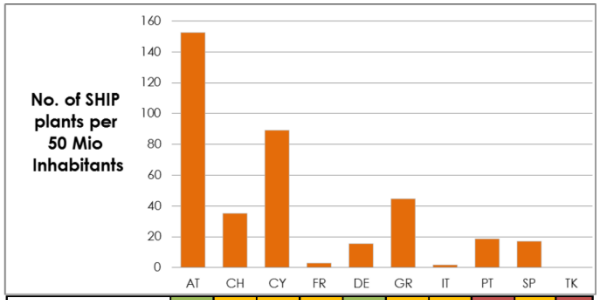
- Comparison of positioning and "success" of SHIP implementation so far



Classification										
Country	**AT**	**CH**	**CY**	**FR**	**DE**	**GR**	**IT**	**PT**	**SP**	**TK**
Policy Support										
Competitive advantage										
Practice based innovation										

Deliverable 8.1: Assessment and Recommendations

- Comparison of positioning and "success" of SHIP implementation so far



Classification										
Country	AT	CH	CY	FR	DE	GR	IT	PT	SP	TK
Policy Support										
Competitive advantage										
Practice based innovation										

- 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										
Competitive advantage										
Practice based innovation										
Classification										

- Countries with better conditions to fullfill 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)

What next?

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

WP8 – Task 8.2

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

WP8 – Task 8.3

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.

WP8 – Task 8.4

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 <u>Workshop</u> (WP7) in a national industry event** (‚national workshop recommendation slides')

Presentation on Advanced Networking

Muchas gracias por su atención!!