

# Enhancing HEI's participation in regional innovation strategies using self-assessment

# Module 3 HEInnovate and the new HEInnovate for RIS3 (SUNAR self-assessment tool)

DATE:

(partner logo)



# AUTHORIZATI ON









### **INNOVATION SYSTEMS and BOUNDARIES and OVERLAPS/CONNECTIONS**

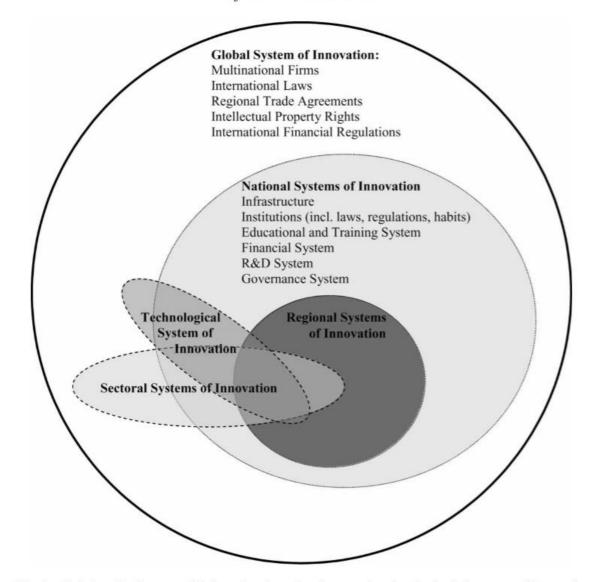


Fig. 3. Relationship between global, national, regional, sectoral and technological systems of innovation Source: FRENZ and OUGHTON (2005)

# HEIs - need to identify their innovative potential and CAPITALIZE ON IT!

"(...) the increasing role of HEIs in national innovation systems and their expected contribution to economic growth, social and cultural development has put an increasing demand on HEIs on knowledge-exchange and technology transfer with economic players." (OECD, 2019)

regional, sectoral, technological and global innovation system boundaries also need to be taken into consideration (Frenz & Oughton, 2005) and the HEIs role in connecting systems, as well as in linking the regional innovation system mostly targeted by RIS3 to other types of innovation systems

#### THEREFORE... Innovative HEIs

- ✓ Need to understand the impact of the changes they introduce in their institution and in the closer and wider (eco-)system(s) they operate in;
- ✓ Should develop clear objectives, which are reflexive, regularly monitored and evaluated;
- ✓ Should assess and have good understanding of the HEI's knowledge exchange and collaborative activities (with external stakeholders and society);
- ✓ Should develop an internationalization strategy and regularly monitor and evaluate whether this is in line with its entrepreneurial agenda and RIS3 related objectives.



HEInnovate guides HEIs through a process of understanding, prioritization and action planning in eight key dimensions.

## **HEINNOVATE**





If your Institution\* has used it, do you have access to the results?

NB: HEInnovate can be used at <u>institutional level</u> (e.g. by a University) but also at <u>Faculty level</u> (e.g. different faculties of the same University perform the self-assessment separately)



### WHO IS HEINNOVATE FOR?

- **Open to all** HEIs (Universities, University Colleges, Polytechnics, etc.)
- Free of charge
- Available in all EU languages
- Intentionally open and flexible so you can choose how to organise and use the results

You can explore HEInnovate here: https://heinnovate.eu/en









# **HEINNOVATE** - SUPPORTING ENTREPRENEURIAL AND INNOVATIVE UNIVERSITIES

#### Self-assessment tool used as basis and reference in RE-ACT



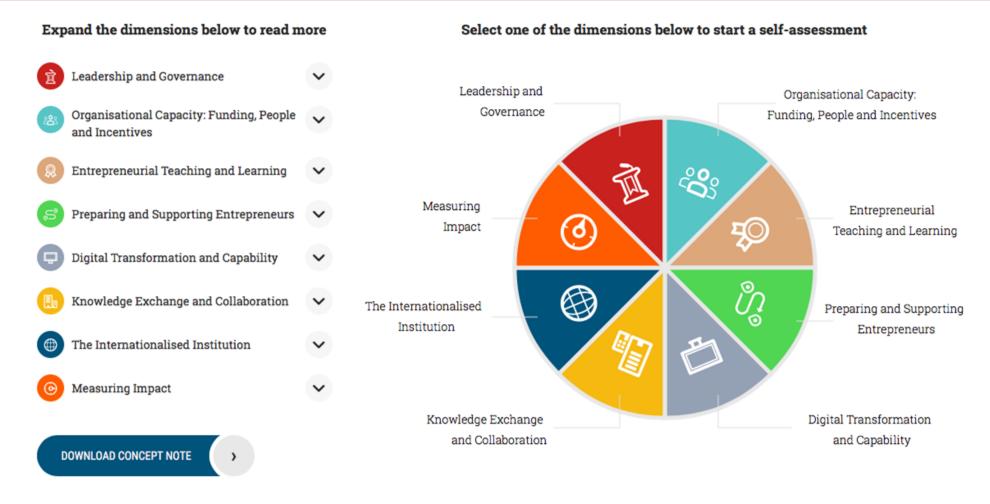
- □HEInnovate is a self-assessment tool for Higher Education Institutions who wish to explore their innovative potential.
- It guides you through a process of identification, prioritisation and action planning in **eight key areas** (but HEIs can choose only one or some dimensions and still be able to work on an action plan aligned with their vision or strategy)
- ☐ It is useful to identify areas of strengths and weaknesses
- □Opens up discussion and debate on the entrepreneurial / innovative nature of your institution.



Tollow up: HEIs can capitalise on the results of the self-assessment along the eight dimensions in order to propose and implement actions and measures that help them in becoming more innovative and entrepreneurial.

RE-ΛCT

# **HEINNOVATE** - SUPPORTING ENTREPRENEURIAL AND INNOVATIVE UNIVERSITIES





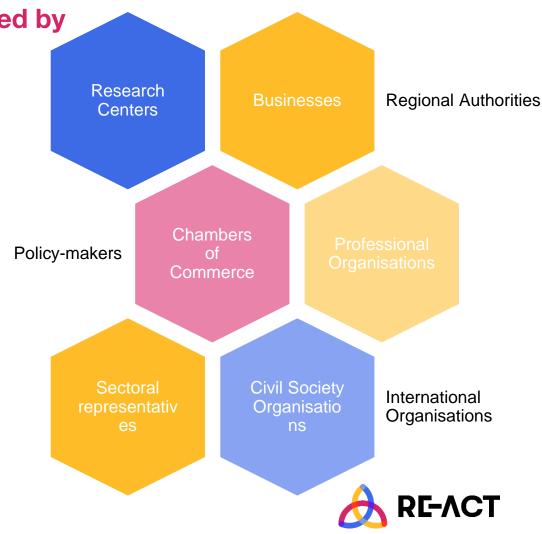
HEInnovate is very beneficial for supporting a better involvement of universities in regional development through innovation and entrepreneurship. But is it fully tailored to RIS3 as a new approach to innovation policies? RE-ACT aims to contribute to this!



### Involvement of external stakeholders in the HEInnovate self-assessment

In some dimensions, it is essential to involve external stakeholders in the self-assessment exercise proposed by HEInnovate:

- Entrepreneurial Teaching and Learning
- Preparing and Supporting Entrepreneurs
- Knowledge Exchange and Collaboration
- The Internationalised Institution



#### Involvement of external stakeholders in the HEInnovate self-assessment

# How can you involve external stakeholders in the self-assessment exercise proposed by HEInnovate?

- ✓ External stakeholders can be invited and added to the self-assessment in HEInnovate
- ✓ Besides, remember that there could be more persons involved from the same university or faculty in the self-assessment – group facility



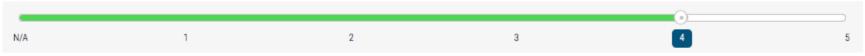
**RE-ACT**, besides facilitating cooperation and interaction, can also support the self-assessment process. During the activities of our project, your HEI will interact with other quadruple helix stakeholders that can, at the longer run, support you in performing self-assessment!



#### **HOW TO USE THE STATEMENTS**

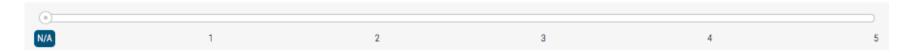


Under each statement, there is a sliding bar which moves from n/a to 5



Click or drag the bar from the left to the right to indicate the score on a scale of 1-5, with 5 being the highest score

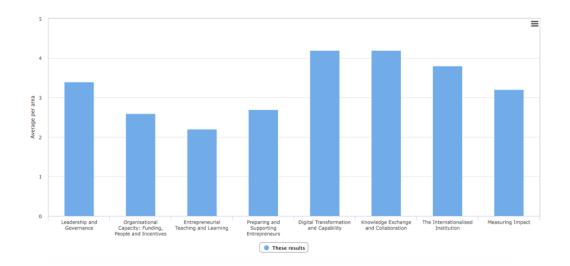
The bar can be left at n/a (not applicable), if the statement is unanswered



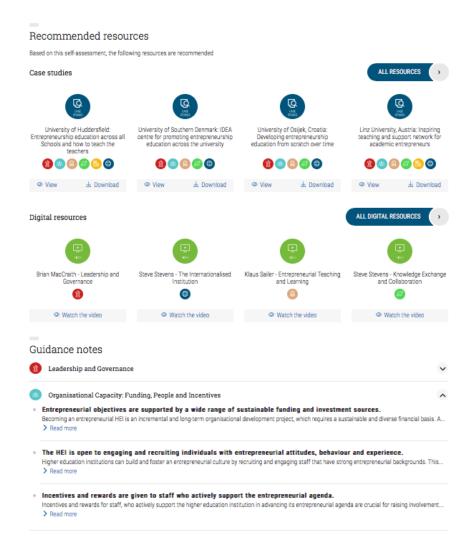
When finished, submit the completed self-assessment, and the results are displayed showing the average for each of the eight areas and the detailed results i.e. the scores given for the individual statements



#### **HOW ARE THE RESULTS DISPLAYED?**

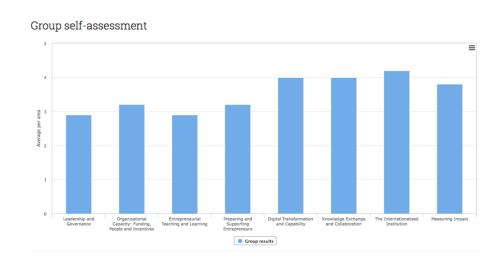


Upon submission of the self-assessment, the average results are displayed as a bar chart (above), and additional resources are recommended (to the right)

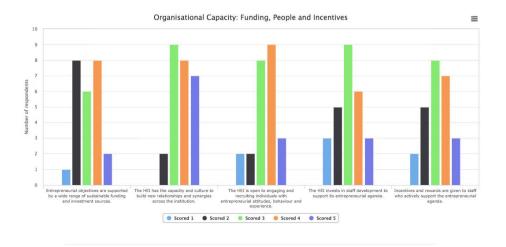




## WHAT HAPPENS TO THE RESULTS IN A GROUP?



The group results are displayed for the group administrator in various charts that can be tailored (online) and downloaded







# **GOOD PRACTICE 1: HEI using HEINNOVATE results – University of Aveiro**

# **University of Aveiro (UAVR), (Portugal)**

#### **Background**

- Created in 1973, the University of Aveiro (UAVR) is one of the most dynamic and innovative universities in Portugal, despite not being in one of the main cities (Lisbon, Porto).
- UAVR has over 13000 students distributed by 16 Departments and 4 Polytechnic Schools, organic structures that work together in an inter-disciplinary way according to their academic and research affinities.
- UAVR is a considered a research-oriented university where innovative products and solutions are developed and contribute to the advance of science and technology.



Therefore UAVR is a privileged partner for companies and other national and international organisations, by means of cooperation and co-creation projects with and for the society.



# **GOOD PRACTICE 1: HEI using HEINNOVATE results – University of Aveiro**

#### Evaluation – using HEInnovate at UAVR - Department of Mechanical Engineering

#### 1st implementation of HEInnovate (end of 2014)

- <u>Target audience</u>: members of the Centre for Mechanical Technology and Automation (TEMA) research centre (scholars, PhD students, post-docs, researchers and HE teachers).
- <u>Engagement</u>: Personal invitations sent using official/formal email communications through the HEInnovate platform. Message included a summary of the main ideas and context behind HEInnovate, as well as its importance, in order to guarantee the proper awareness about the self-assessment tool.
- <u>Dimensions & results</u>: All dimensions of HEInnovate were addressed (seven, at that time). 40% completed responses. The results were subsequently debated in an "in-person" general meeting.

#### 2<sup>nd</sup> implementation of HEInnovate (beginning of 2016)

- <u>Target audience</u>: members of the students' association of mechanical engineering of UAVR.
- <u>Engagement</u>: In-person meetings prior the self-assessment exercise to understand the vision of the students regarding the entrepreneurial performance of the department and the usefulness of adopting a self-reflection tool to assess it. At the end of the meeting and debate, students were invited to fulfil the HEInnovate assessment.
- <u>Dimensions & results:</u> All seven dimensions addressed, individually, during a period of two weeks after the meeting. 54% completed responses.



# **GOOD PRACTICE 1: HEI using HEINNOVATE results – University of Aveiro**

#### **Results:**

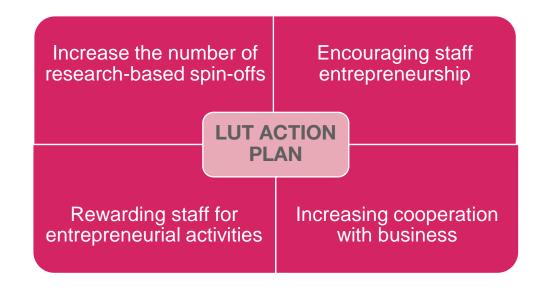
- Effective and good communication between all agents within HEIs was considered crucial;
- In both implementations, HEInnovate tool was discussed as a self-reflection tool, together with its usability and user-friendliness for the topic;
- The most debated dimension in both target audiences was the "Entrepreneurial Teaching and Learning";
- Students considered as fundamental actors for the assessment of Innovation and Entrepreneurship (with)in HEI;
- Rooted conviction (even within the teaching staff) that "entrepreneurship" is all about creating start-ups.

#### **Key Takeaways**

- The promotion of actions needs a proper team, engaged and committed with the topic of entrepreneurship and innovation in Higher Education Institutions.
- An adequate setup of HEInnovate is crucial to fully accomplish the objective of its implementation. The clear communication and contextualization about the purpose of using HEInnovate, together with its characteristics (namely the flexibility and self-diagnose without benchmarking and ranking) is also considered important.
- In-person debates are needed to increase the impact of the action and its translation towards effective and contextualized actions and, subsequently, change of behaviours.

# **GOOD PRACTICE 2: using HEINNOVATE results – Lappeenranta University of Technology**

- ➤ In Finland, at the Lappeenranta University of Technology (LUT), HEInnovate has been used to guide the process of strategy development and to define the new action plan for entrepreneurship.
- HEInnovate was used as a common reference framework for discussion and, through the use of workshops, staff members were able to come up with concrete actions for the plan.







# Other useful resources complementing HEInnovate



## **EPIC**

The Entrepreneurial Potential and Innovation Competencies (EPIC) course assessment tool was designed to help educators to measure the effectiveness of their entrepreneurship courses. It can be used to assess the skill and competence development of participants in different entrepreneurship courses.

# entrelime

A new entrepreneurship education service aimed at upskilling educators within HEIs and upgrading their pedagogical tools on this domain by providing a comprehensive training package



# **HEInnovate and financial support to HEIs**

#### **HEI Initiative: Innovation Capacity Building for Higher Education**

- Launched by the European Institute of Innovation and Technology (EIT)
- Aims at helping HEIs to build the capacity to innovate and to teach innovation and entrepreneurship
- > Aims to encourage these institutions to look at their own practices and develop concrete actions to increase their impact on their ecosystems.











Institutional change

Partnerships

Innovation

Entrepreneurship

Knowledge sharing



The use of HEInnovate for the elaboration of an Innovation Vision Action Plan (IVAP), is a mandatory project eligibility criteria for each HEI partner in a consortia (i.e. a university or a faculty or more than one faculty within the university).



Erasmus supports capacity building of HEIs and the transformation of the European educational landscape through its calls.

<u>Examples</u>: Strategic calls, such as the KA3-PI-FORWARD, or other such calls like, the one on the topic of "European Universities".



# Live demonstration of the HEInnovate website and the self-reflection tool



**CLICK HERE** 



# From HEInnovate results TO Action Planning



The THEI2.0 project aims to support decision making by the decision makers of Higher Education Institutions, in their various fields of intervention, in order to make them more innovative and entrepreneurial, above all allowing greater involvement, participation and communication by the people who define them.



By matching up the HEInnovate results with one of the **7 profiles** provided

- 1. The Future Leader
- 2. The Builder
- 3. The Educator
- 4. The Internal Performer
- 5. The Regional Performer
- 6. The Internationally Ambitious
- 7. The Guru



# **HEInnovate results TO Action Planning**

#### How to set up an action plan starting with HEInnovate?

The case of Tecnocampus in Applied Sciences University affiliated to Universitat Pompeu Fabra, Barcelona, Spain

The implementation of HEInnovate at Tecnocampus was done via workshop where the participants were teachers and researchers, academic managers and technical staff from different units, including professionals from other HEIs.

#### Main results:

- ☐ The use of the HEInnovate assessment tool facilitated a structured debate that took into consideration every aspect of an entrepreneurial HEI;
- ☐ The integration of research on entrepreneurship into entrepreneurial teaching and learning was considered important by the teaching staff;
- ☐ The 'Impact' measurement was deemed underdeveloped in HEIs, and agreed on the need of conducting regular monitoring and evaluation of the entrepreneurial agenda across different levels of the university.



#### The new HEInnovate for RIS3 - SUNAR – what for?

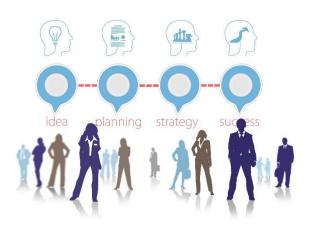
# SUNAR stands for Smart Universities Acting Regionally This tool supports HEIs to:



Assess their current active engagement in the regional ecosystem



Revise their strategies, structures and practices



Take action to become regionally embedded, entrepreneurial and smart universities

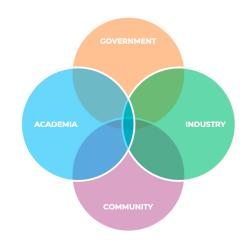


## The new HEInnovate for RIS3 - SUNAR - what for?

## The new SUNAR self-assessment tool supports HEIs to:



Debate and agree upon a joint positioning for HEIs as regional asset



Engage all the key actors of the quadruple helix and underpin a profound collaborative work strongly connected to RIS3



Engage in peer support to quadruple helix networks from other regions, strengthening HEIS in their pivotal roles in sustaining innovation



#### The new HEInnovate for RIS3 - SUNAR – what for?

- ✓ SUNAR is a useful tool to support the participation of HEIs in the creation and implementation of regional strategies, to identify areas for improvement of HEIs' departments. It helps the cooperation between HEIs and regional stakeholders, enterprises, corporates and society at large.
- ✓ In order to better contribute to RIS3, HEIs should first clearly state their goals, identify their strengths and weaknesses, identify the most relevant areas of research and education and third mission activities and make synergy in the research areas of different teams.







Universities must capitalize the results of the self-assessment along the eight dimensions of SUNAR in order to propose and implement actions and measures that help them in becoming more entrenched within the quadruple helix of their region and in this way promote innovation and regional development.



#### **SUNAR** tool – be aware that...

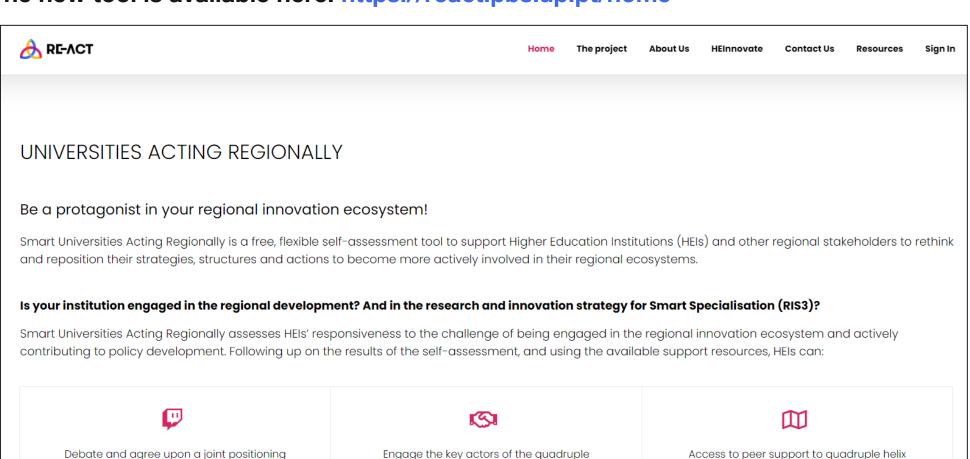
- The tool focuses on HEIs role in RIS3 and is very overarching and complex! NO HEI SHOULD STRIVE
   TO FULFILL ALL EXPECTATIONS!
- **SUNAR** should be rather seen as a **general framework**, based on which a HEI should be able to take **informed decisions** about **future actions** to be taken in a **step-by-step manner**.
- Such decisions should **also** be **evidence-based** and besides the result of the self-assessment should take into consideration other factors and information like:
  - own institutional strategy,
  - human and financial resources available,
  - policy context (RIS3 specialisation and operational priorities),
  - regional challenges and fabric, dynamics of quadruple helix cooperation and needs of the community,
  - etc.

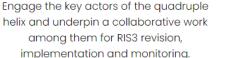


In short, the <u>SUNAR tool needs to be seen as a guiding framework supporting institutional</u> <u>capacity and capability building linked to RIS3</u>, relying on <u>existing situation</u> and based on the HEIs <u>long term vision!</u>

for HEIs as regional assets.

#### The new tool is available here: https://react.pbs.up.pt/home





Access to peer support to quadruple helix networks from other regions, strengthening HEIS in their pivotal roles in igniting, cherishing, and sustaining innovation.





#### Leadership and Governance

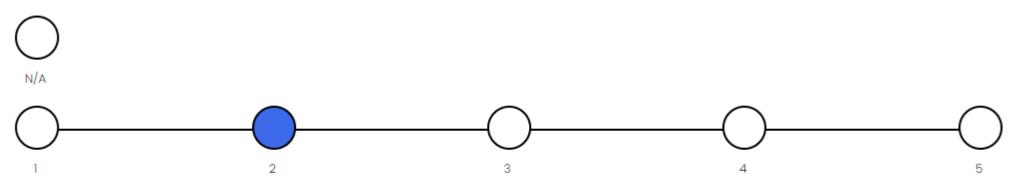
The effective involvement of an HEI in the smart specialisation process implies commitment and entrepreneurial orientation by HEI senior (higher) managers and decision-makers. Managerial, regulatory and infrastructural frameworks based on which HEIs interact with their external environment determine the extent of their participation and impact on regional innovation. This dimension underlines the most important steps and actions HEI senior managers decision-making structures should take in order to facilitate the HEIs participation in different phases of RIS3 design (including revision) and implementation (including monitoring and evaluation). It covers HEI senior managers' involvement in regional RIS3 governance structures, as well as other steps that HEI decision-makers should take in order to facilitate the institutions' internal involvement in RIS3 and the HEI's external involvement in the regional innovation ecosystem as part of the quadruple helix.

Each dimension assessed in *SUNAR* presents a brief summary of what is being assessed under the heading.



Under each statement, there is a scale from n/a to 5 which enables an assessment of how the HEI
performs against the statement.

1 :: The HEI is represented through its senior management in the highest governing body of RIS3 on a regional level.



RIS3 design and implementation is a bottom-up, collaborative process, involving stakeholders from the quadruple helix. These stakeholders, including academia, are brought together in entrepreneurial discovery processes and different region-specific governance structures to support the identification of new opportunities, but also to create ownership of the strategy and ensure stakeholder involvement during strategy design and implementation.

A typical RIS3 governance structure at the regional level consists of a steering group, working groups and a management team. The steering group is the highest level RIS3 governance body, gathering high level representatives of regional stakeholders, including HEIs, and is responsible for the overall success of the strategy, together with the policy making organization.



 Under each statement there are also some guidelines to support the assessment, indicating what actions should be in place for higher scores. This is to support clear positioning in each statement.

To score highly, an HEI could, for example:

- Be represented in the RIS3 steering group by a person from senior management, actively contributing to coordination with other RIS3 governance structures and to the integration of stakeholder viewpoints in the design and implementation of the strategy
- Actively encourage a culture of collaboration with other steering group members and further external and internal partners to contribute to the success of the RIS3
- Provide institutional support in the design, and implementation of the strategy
- Act as one of the leaders of the RIS3 at regional level, contributing to efficient communication about the importance
  of smart specialisation and to the mobilization and involvement of a wide variety of stakeholders in the
  entrepreneurial discovery process
- Cooperate with other members of the governance structure to support local and regional policymakers in addressing complex policy, practical and societal challenges



#### **SUNAR** – the statements



#### Leadership and Governance

- The HEI is represented through its senior management in the highest governing body of RIS3 on a regional level.
- The HEI is strategically committed to implement its third mission taking into account RIS3 objectives.
- 3 Senior management of the HEI ensures that processes, procedures and internal communication measures facilitate the HEI's participation in key steps of RIS3 design and implementation.
- 4 The HEI is able to reach out to and attract key innovators from the faculties into the entrepreneurial discovery process and RIS3 implementation.
- 5 Every HEI employee involved in RIS3 has equal access to all information; the principles of transparency and participation are consistently applied.

# Q.

#### Entrepreneurial Teaching and Learning

- 1 The HEI graduate programmes provide knowledge and skills related to RIS3.
- 2 The HEI delivers training programmes to support the upskilling and reskilling of staff in the smart specialisation priority areas.



#### Organisational Capacity: Funding, People and Incentives

- 1 The HEI maintains a structured, up-to-date registry of its internal knowledge assets.
- 2 The HEI has dedicated qualified personnel to support academics and researchers in research and innovation.
- 3 The HEI has organisational structures dedicated to knowledge and technology transfer that cover the smart specialisation priority areas.
- 4 The HEI promotes multidisciplinary cooperation among different departments/faculties/research units in accordance with business and society needs.
- 5 A system of rewards is in place to involve staff from different departments of the HEI in research and innovation activities.
- 6 The HEI makes the best use of available funding opportunities for research and innovation to contribute to RIS3 objectives.



#### Preparing and Supporting Entrepreneurs

- 1 The HEI actively supports companies in the smart specialisation priority areas in their research and innovation activities.
- 2 The HEI develops and provides services to support entrepreneurship and innovation in companies.
- 3 The HEI provides RIS3 partners with access to information on prospective research results that can be commercialised.



4 The HEI supports its researchers and students in establishing innovative start-ups and spin-offs, especially in smart specialisation priority areas.

#### SUNAR



#### Digital Transformation and Capability

- 1 The HEI uses the advantage of digital technologies to foster innovation on a regional level.
- 2 The HEI supports digital transition at regional level.
- 3 The HEI contributes to the uptake and the dissemination of the latest digital technological advancements



#### The Internationalised Institution

- 1 The HEI participates as a partner in European and international R&I projects.
- 2 The HEI links the region to external knowledge sources.
- 3 The HEI is engaged in European and international R&I networks.



#### Knowledge Exchange and Collaboration

- The HEI supports innovation in smart specialisation priority areas through collaboration with other regional quadruple helix (QH) stakeholders.
- 2 The HEI supports the regional RIS3 responsible organisation(s) in the strategy development and implementation.
- 3 The HEI supports university-industry links and mobility.
- 4 The HEI facilitates cooperation between Quadruple Helix actors.
- 5 The HEI analyses the current and future needs of society and business, providing the knowledge to respond to the challenges



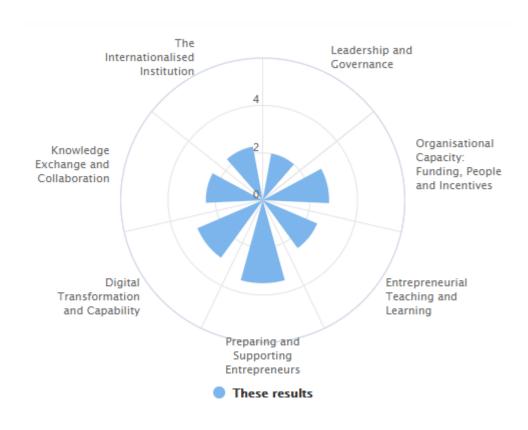
#### Measuring Impact

- 1 The HEI is actively involved in participatory RIS3 monitoring, evaluation and learning activities
- 2 The HEI measures its own contribution to reaching RIS3 objectives.



# **SUNAR**– results presentation

#### **Overview**



In this example of a self-assessment using *SUNAR*, the dimensions scoring the lowest are:

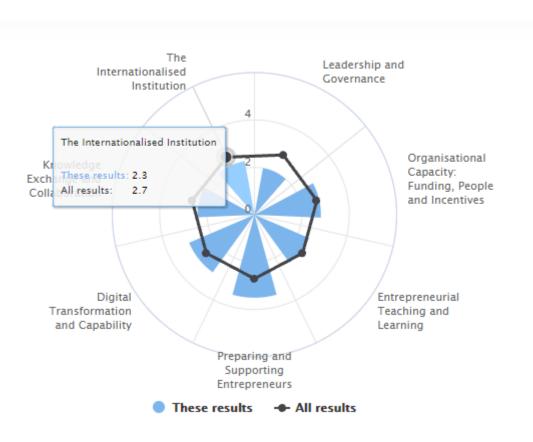
- Leadership and Governance (2)
- The Internationalised Institution (2.3)
- Knowledge exchange and collaboration (2.4)

This chart is generated automatically and can be downloaded from the platform to have an overview of the areas that need improvement and need to be addressed through an action plan.



# **SUNAR - results presentation**

#### Comparison



Similarly to the HEInnovate tool, the SUNAR allows multiple assessments from professionals within the HEI or externally (by stakeholders) and enables a visual comparison of perspectives on entrepreneurship features based on the role HEIs should/could play within the regional innovation (eco-)system in the context of smart specialisation.

This chart allows the comparison of these results against all self-assessments completed.



# **SUNAR - results presentation**

**Detailed results** are produced with the score for each statement and a global score for each dimension assessed.

The PDF can also be downloaded from the platform and is generated for each assessment completed.

a	RE-ACT	2021-09-22
Se	lf-assessment detailed results	
Leadership and Governance		
1	The HEI is represented through its senior management in the highest governing body of RIS3 on a regional level.	3
2	The HEI is strategically committed to implement its third mission taking into account RIS3 objectives.	2
3	Senior management of the HEI ensures that processes, procedures and internal communication measures facilitate the HEI's participation in key steps of RIS3 design and implementation.	2
4	The HEI is able to reach out to and attract key innovators from the faculties into the entrepreneurial discovery process and RIS3 implementation.	2
5	Every HEI employee involved in RIS3 has equal access to all information; the principles of transparency and participation are consistently applied.	3
Org	ganisational Capacity: Funding, People and Incentives	2
1	The HEI maintains a structured, up-to-date registry of its internal knowledge assets.	2
2	The HEI has dedicated qualified personnel to support academics and researchers in research and innovation.	1
3	The HEI has organisational structures dedicated to knowledge and technology transfer that cover the smart specialisation priority areas.	2
4	The HEI promotes multidisciplinary cooperation among different departments/faculties/research units in accordance with business and society needs.	3

A system of rewards is in place to involve staff from different departments of the HEI

The HEI makes the best use of available funding opportunities for research and

in research and innovation activities.

innovation to contribute to RIS3 objectives.



### **SUNAR**

START NEW SELF-ASSESSMENT

View all self-assessments

#### My self-assessments list

STATUS: COMPLETED

SUBMITTED AT: 2021-09-29 10:34:52

STATUS: COMPLETED

SUBMITTED AT: 2021-09-22 13:25:03

O View result

Delete

STATUS: COMPLETED

SUBMITTED AT: 2021-09-08 18:15:05

O View result

Delete

Upon completing a self-assessment it is possible to submit a new one and view all the forms completed so ... several professionals can collaborate!



# Ready to try it?

Register: https://react.pbs.up.pt/signin

Sign in or create a new Smart Universities Acting Regionally account					
To start a self-assessment lease sign in below, if you already have an Smart Universities Acting Regionally account. Alternatively, you can register a new account. <b>Registration is free and confidential.</b>					
Sign in		Register			
E-mail *		Name *			
Password *		Surname *			





How did the self-assessment process go?

What do you think about the SUNAR in terms of...?

- ✓User-friendliness easy to use?
- ✓Language clear and easy to understand?
- ✓Accuracy adequate language?
- ✓Usefulness did it help?
- ✓Relevance does it bring added value?
- ✓Innovation has differences in relation to HEInnovate?

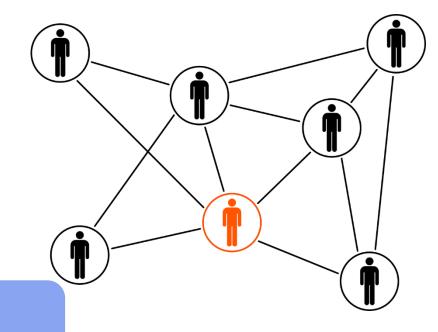


# Next steps...



# **Action plans and organizational change**

Rethinking and repositioning HEIs strategies, structures and actions





# Rethinking and repositioning HEIs strategies, structures and actions

Fostering multi-stakeholders engagement in HEIs optimization processes



Action plans can be done using the HEInnovate template, but also any other format, including that of the HEI can be used ...

... the most important thing is to have all information necessary to be able to deploy and implement the action(s) included.



#### HEInnovate: My commitment to action

HEInnovate workshops are designed in order to help HEIs identify their strengths and weaknesses and priorities actions for the future. At the end of the workshop, documenting actions is a useful way of reminding participants of the outcomes of the workshop.

This sheet allows participants to write down their intended actions, ones which are specific to their own objectives and responsibilities, and set within their own sphere of influence.

Please use as many action sheets as you need.

Issue identified:
Action:
Intended outcome:
Responsible / Lead:
Who else needs to be involved?
Proposed timescale for action / outcome:
How will progress/ achievement be measured?



Conclusions



