The European Network of research infrastructures and Industry for Collaboration

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Deliverable Report:

D4.1 Pilot training sessions evaluation report

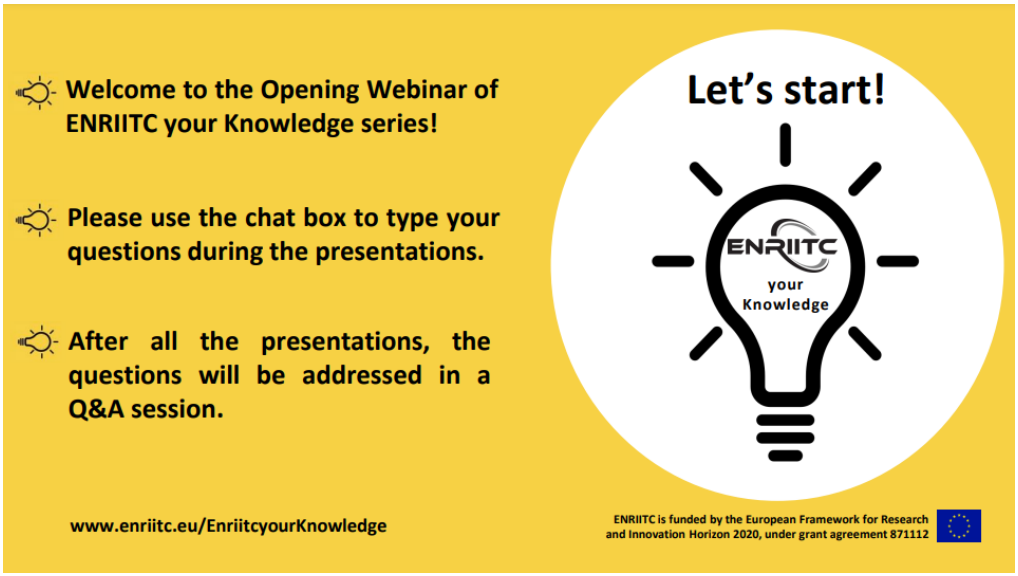

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Table of Content

ENRIITC is funded by the European Framework for Research and Innovation Horizon 2020, under grant agreement 871112

TABLE OF FIGURES

ENRIITC is funded by the European Framework for Research and Innovation Horizon 2020, under grant agreement 871112

TABLE OF TABLES

ENRIITC is funded by the European Framework for
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Terminology

'Big Science' – Big Science organisations are a common term used for legal entities which build and manage large-scale international research infrastructures, where the scope and cost of the investment exceeds the capability of just one country. Thus, several countries (member states) join forces to finance the infrastructure. These are usually found in the ESFRI Physical Sciences & Engineering domain, and examples are particle accelerators and telescopes. Examples are: CERN, ESO, ESRF, and ITER.

BSBF – The Big Science Business Forum is a business-oriented congress which congregates the main European Big Science Research Infrastructures, focused on technology and with the aim to be the key meeting point between these Research Infrastructures and industry. The first edition was held in 2018 in Copenhagen. The second edition will take place in October 2022 in Granada.

ESFRI RESEARCH DOMAIN – The European Strategy Forum of Research Infrastructures (ESFRI) has identified six main thematic domains of research (ESFRI Strategy Report and Roadmap 2018; pg. 38): Energy (ENE), Environment (ENV), Health & Food (H&F), Physical Sciences & Engineering (PSE), Social & Cultural Innovation (SCI), and – since 2017 – Data, Computing and Digital Research Infrastructures (DIGIT).

GEORETURN – The financial return of a member country on the investment in developing and operating research infrastructures.

ILO – INDUSTRY LIAISON OFFICER. Officially appointed by the Member States and Associated Countries to stimulate the collaboration amongst the national industry and the international RIs, providing advice on business opportunities, R&D collaborations, calls for tenders, and industrial services."

ICO – INDUSTRY CONTACT OFFICER. Research Infrastructures staff in charge of developing business relations with all potential industrial suppliers of innovative components or services, as well as encouraging the economical use of their facility by private players.

PERIIA – The Pan-European Research Infrastructure ILO Association (PERIIA) network launched in 2019 as a grassroots movement offering a communication and discussion platform for ILOs. The aim of the network is to pave the way and prepare for the establishment of PERIIA as a legal entity in the form of a European association.

RI – RESEARCH INFRASTRUCTURES are facilities that provide resources and services for research communities to conduct research and foster innovation. RIs can be used beyond research, e.g. for education or public services. Research Infrastructures include: major scientific equipment or sets of instruments; collections, archives, or scientific data; computing systems and communication networks; and any other research and innovation infrastructure of a unique nature which is open to external users.

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Abbreviations

ASTP	Association of Knowledge Transfer Professionals
CERN	Conseil Européen pour la Recherche Nucléaire
CDTI	Centre for the Development of Industrial Technology (CDTI)
CERIC	Central European Research Infrastructure Consortium
CLARIN	Common Language Resources and Technology Infrastructure
COVID-19	Coronavirus (SARS-CoV-2) disease
DARIAH	Digital Research Infrastructure for the Arts and Humanities
DTI	Danish Technological Institute
EATRIS	European infrastructure for translational medicine
EMSO	European Multidisciplinary Seafloor and water column Observatory
ENRIITC	European Network of research infrastructures & Industry for Collaboration
ESFRI	European Strategic Forum on research infrastructures
ESO	European Southern Observatory
ESRF	European Synchrotron Radiation Facility
ESS	European Spallation Source
F4E	Fusion for Energy
ILL	Institut Laue-Langevin
ITER	International Thermonuclear Experimental Reactor
NeurATRIS	Translational research infrastructure for innovative therapies in Neuroscience
PRACE	Partnership for Advanced Computing in Europe
KPI	Key Performance Indicator
SKAO	Square Kilometre Array Observatory
NWO	The Dutch Research Council
SME	Small or Medium Enterprise
XFEL	X-Ray Free-Electron Laser
WPT	Wrocław Technology Park

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1. Executive Summary

The ENRIITC project aims to build a permanent pan-European network of Industrial Liaison and Contact Officers (ILOs and ICOs) and enable industry to become a full partner of research infrastructures whether it is as a user, a supplier, or a co-creator. In other words, ENRIITC supports the establishment of strategic, cross-border partnerships between industry and research infrastructures.

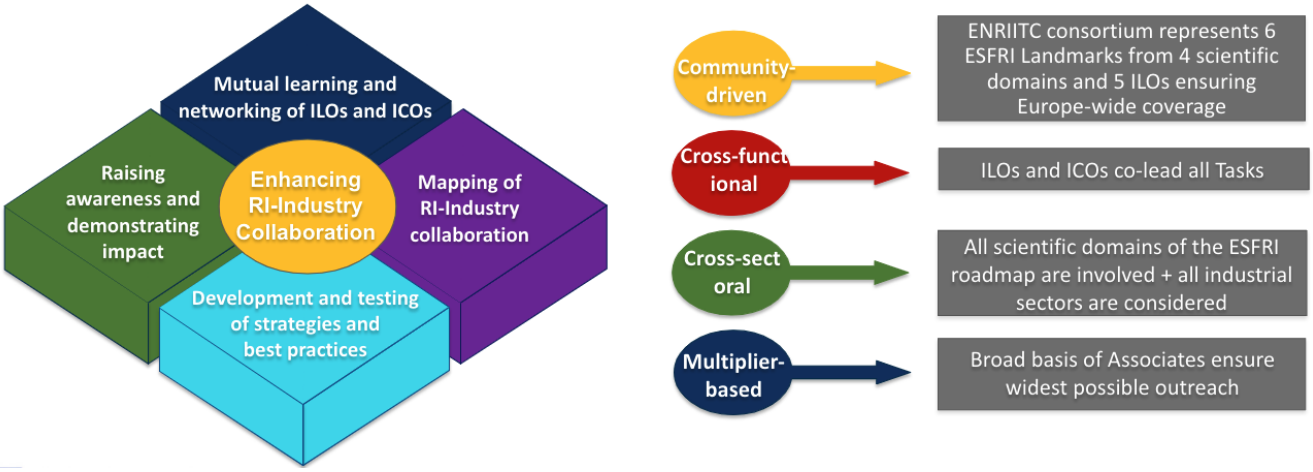

Figure 1- ENRIITC main objectives

In Task 3.2 a strategy for training of ILOs/ICOs and outreach towards industry was developed and the outcome was released in the Deliverable 3.3. At the heart of the strategy are the proposed training paths to develop the skills needed to lead the RI innovation awareness-building, design industry outreach and communications strategies, develop the organisational structure, defining the range of specialized support services and training, and ensure quality and continuity.

In Task 4.2 the strategy developed in Task 3.2 has been put to test through the organisation of eight training and organisational webinars aimed at ILOs and ICOs. All of the webinars have been open to ILOs and ICOs, member and associate partners of the ENRIITC project, and the community in general. The purpose has been to provide test samples of different aspects of the strategy, analyse the outcome and provide feedback to fine tune the strategy developed in Task 3.2.

This deliverable focuses on the following elements:

1. Description of the pilot training and organisational webinars which were conducted during months M18-M30
2. Results and discussion of the results
3. Recommendations to improve the strategy for training of ILOs/ICOs and outreach towards industry developed in Task 3.3.

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The webinars that were organised in the task are listed in the following table:

	Training and organisational webinar	Training needs
#1	***"The ILO and ICO role for beginners"***	To provide basic information for ILO and ICO beginners and for the outside world.
#2	***"The basics of physical brokerage events for first-time organisers"***	To provide new or existing ILOs and ICOs with the knowledge of the tools and processes to organise physical brokerage events.
#3	***"Industrial impact on the Big Science market after one year of the COVID pandemic"***	Identify the status of the Big Science market after the pandemic and develop a common set of recommendations.
#4	***"Tricks & tips on how to organise successful digital events with industry and Research Infrastructures"***	Due to COVID-19 more and more events are becoming digital, and ILOs and ICOs need to know the tools, procedures and best practices to organise digital events with the involvement of Industry and RIs.
#5	***"Strategies for SME interaction and participation in brokerage events"***	Understanding the best way to interact with SMEs, sharing common experiences and approaches, success stories, etc. Provide guidance to ILOs on ICOs on what is the best way for SMEs to maximise their participation in brokerage events
#6	***"Exploring new avenues for ILOs: knowledge transfer to industry and use of research infrastructures"***	To provide knowledge to ILOs, who are appointed by their governments to support industry as a supplier to Big Science Organisations, on areas where they are less involved such as fostering industry as a user or knowledge transfer.
#7	***"Resolving issues on the path to public-private collaboration"***	To equip ICOs, ILOs and others involved with the knowledge and skills needed to set up successful collaborations which address issues of importance to both RIs/academia and industry partners: IP, publication, ownership, use rights, licensing
#8	***"Towards a broader and enhanced ENRIITC ILO&ICO network"***	To share success, stories, experiences and endeavours from fellow ICOs and ILOs on new ways to engage with industry, collaborate, overcome communication barrierrs and work in new domains.

Table 1 - Summary of ENRIITC your Knowledge training and organisational events

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Recommendations to improve the strategy for training of ILOs/ICOs and outreach toward industry are summarised in the following tables:

Recommendations towards the organisation of training and organisational events	Recommendations towards future training topics
•Participants value interaction but the appropiate mechanisms must be carefully planned for it to be effective. •Digital events (webinars) are effective but suffer from lack of interaction and involvement of participants, so they should be combined with face to face events. •The use of different tools (Menti, breakout rooms, etc.) is effective to engage participants and allow sharing of experiences •Bringing in external actors (industry, clusters and other stakeholders) provides added value •Training is a powerful tool to connect and make industry aware of the possibilities of collaboration offered by RIs. •The real added value of training and organisational webinars is to provide a means for ILOs and ICOs to share their experiences, strategies and success stories	•The role of the ILO/ICO interaction to foster innovation •How to engage with new industry partners and expand your network •How to connect researchers with industry •Technology and knowledge transfer: building new markets around disruptive technologies emerging from RI projects •Organisation of hybrid events •Digital tools for ILOs/ICOs to connect and provide servide to industry •Topics of interest to the ILO and ICO community should be combined with custom topics addressing the needs of ILOs or ICOs, focused on specific ESFRI domains •ILOs and ICOs can learn from each other and future interaction should build on the start made in ENRIITC

Table 2 - Summary of recommendations

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2. Introduction and Methodology

The ENRIITC projects aims to build a sustainable network of ILOs and ICOs across all the ESFRI domains to promote collaborations between research infrastructures and industry acting as a supplier, user and co-developer. In order to do so the ENRIITC partners identified, at the proposal stage, that training and networking between the ILO/ICO community is an important tool to develop our competences, specialise and to learn from each other.

In Task 3.2, a strategy for training of ILOs and ICOs has been developed, based on multiple sources of information: an analysis of current training opportunities across Europe, interviews and meetings with the ENRIITC partners, two ENRIITC your Coffee sessions devoted to training and organisational aspects, and several focus groups which in several meetings analysed different aspects among which training and working together as a network was a recurring topic.

D3.3 summarises the training skills needs which have been identified as most relevant for ICOs and ILOs:

ICOs:

Soft skills	Hard skills
•Communication (including storytelling, writing reports, language, etc.) •Leadership (facilitation, negotiation, conflict management, decision making, etc.) •Critical thinking (problem-solving, troubleshooting, thinking outside the box, etc.) •Creativity (open-mindedness, lateral thinking, brainstorming, vertical thinking) •Teamwork (empathy, interpersonal skills, social skills, team building, etc.) •Management (time, human resources, risk, costs, projects) •Integrity (work ethic, motivation, perseverance, reliability, result-oriented, etc.) •Positive attitude (courtesy, cooperation, enthusiasm, patience, etc.) •Marketing (development and presentation of the offer)	•Fundraising (local, regional, national and European level) •International networking and collaboration skills targeting new industry business relations •Technical and policy insight into the RI and, in particular, tools on how to analyze, compile and deploy technology transfer and licensing agreements •Knowledge about industry collaboration models and formation of new industry partnerships, spin-offs/start-ups •Event organisation (seminars, meetings, hackathons) with industry to obtain input to the RI industry strategy (see D3.4) •Communication (in collaboration with the RI Communication Officer) for maintaining an RI Communication Plan targeting industry and writing annual reports with engaging innovation case studies to be showcased by the RI •IPR and GDPR data management (in collaboration with the RI Data Manager) to be able to handle confidentiality and access issues with industry

Table 3 - Summary of ICO training skills (D3.3)

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ILOs:

Soft skills	Hard skills
•Communications, including internal RI communications •Management skills •Networking and collaboration skills	•Business knowhow to be able to perform consultancy and support on procurement and tenders •Understanding industry collaboration in the innovation eco-system and possibilities for EU funding •Organisation of brokerage events (see D3.4) and organisation tools (e.g. use of databases) •insight into the operations of the RI from both technical and policy perspective (including rules and regulations) •Industry collaborating models including Technology transfer processes •Negotiations, IPR and legal aspects of contracts

Table 4 - Summary of ILO Training skills (D3.3)

The objective of Task 4.2 has been to implement pilot training and organisation activities addressed at ILOs and ICOs to test the strategy defined in Task 3.2. The overall aim is to share knowledge, expertise, skills and best practices amongst the ILOs and ICOs in order to improve performance and increase collaboration between industry and RIs by increasing ILO and ICO competences.

2.1. Webinar series 1 (#1-#4)

Right from the WP4 kick-off meeting, we identified the need to set up a first series of ENRIITC training and organisational webinars to be organised early on in the series. The purpose of these introductory training webinars was to provide associate members of ENRIITC the tools to submit proposals to the ENRIITC your Industry Outreach call (Task 4.3) which supports the organisation of pilot events by ENRIITC associate members for research infrastructures to engage with industry and using the ENRIITC training programme for such events as a basis. This first series of webinars was planned before the release of D3.3, so that associate partners could have the tools to prepare their submissions for task 4.3 well in advance.

Output from discussions among Task 4.2 participants resulted in the need to organise these first training sessions around the following themes:

- Results from D2.2 showed that ICOs have a varied range of configurations and roles depending on the ESFRI domain, nature of the RI (distributed vs central) and geographical scope. Sometimes there are different figures in the RI which perform this role, usually part-time. D2.2 also proved that there are differences in the understanding and KPIs of the ILO role depending on the nature of the employer (mainly governmental agencies vs public research organisations). It was decided to dedicate Webinar#1 to analyse what it is to be an ILO/ICO with participants explaining their different views and ways of working.

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- The organisation of physical brokerage events is one of the main responsibilities of ILOs and ICOs. Moreover, given the interruption of these events which the COVID-19 pandemic has brought, physical events may well see an evolution in terms of the number of them and scope (less events but more ambitiou). Webinar #2 dealt with the organisation of different modalities of physical RI-industry events: large business forums such as the Big Science Business Forum, technical workshops or industry as a user events.

- COVID-19 has impacted industries' activities across all the ESFRI board and has had an impact across all markets. In particular, the Big Science market (which is included in the ESFRI Physical Sciences and Engineering ESFRI domain) has been affected, delaying some projects and influencing business, in particular for SMEs. Webinar #3 was dedicated to analysing this situation and providing some recommendations, through an initial questionnaire that was responded to by European ILOs. This was the only webinar of the series devoted to a specific ESFRI domain and mainly to ILOs. PERIIA organised this webinar in collaboration with ENRIITC.

- During 2020 and 2021, business has been interacting digitally and this has brought on a large amount of digital brokerage events, Webinar #4 was devoted to the organisation of digital events and exchanging best practices about how to encourage remote participation. This webinar included a breakout session to work in groups and encourage interactivity.

2.2. Webinars series 2 (#5-#8)

Webinars #5 and #8 were organised between the second semester of 2021 and the first semester of 2022. The topics of interest covered different aspects of the strategy for training of ILOs and ICOs included in D3.3 Rationale for the topic selection was the following:

- During discussions in focus groups, project meetings and different fora, the issue of providing specialised and specific support to SMEs has emerged. SMEs often find collaboration with RIs complex and hard to initiate. Therefore it was decided to organise Webinar #5 of the series around strategies for SME interaction and participation in brokerage events, focusing on what an SME should do to maximise their success when participating in such.

- In D2.2. the nature of the ILO role was discussed as well as its nuances depending on the type of the employer. It emerged that ILOs are strongly focused on certain KPIs (georeturn in particular) but also could play an important role in other less-engaged activities, such as fostering co-creation or the use of RIs by industry. In webinar #7 we invited representatives from Big Science organisations to explain to the ILO community how they work and engage with industry as a user.

- Legal and practical issues were established as critical when setting up collaborations between industry and RI. Aspects like intellectual property, publication, user rights or licensing are topics in which ILOs and ICOs should be experienced with. Webinar #7 revolved around these issues, drawing lessons on the experience of speakers from different RIs.

- Finally, we decided to follow a collaborative approach for Webinar #8, in response to the fact that participants in the different webinars valued the sharing of success stories and experiences from the members of the ENRIITC community as an important added value of the ENRIITC network. This webinar congregated speakers from a variety of ESFRI domains to reflect on different approaches followed by RIs to engage industry.

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Other topics of interest, not covered in the webinars but discussed amongst the task partners when designing the webinar series were the following:

- "*More innovation by expanding interactions between ILOs and ICOs*": to examine and analyse strategies to increase interaction between ILOs and ICOs across the same ESFRI domain, which brings more innovation across the board.
- "*Challenges and opportunities during the new COVID-19 scenario in several ESFRI domains*": to learn how to tackle the challenges and how to take advantages from opportunities that the pandemic has granted and explore new ways of working between industry and RIs, focusing on different ESFRI domains.

2.3. Branding of the events

Working in collaboration with WP5 it was decided to create a specific brand for the training and organisational webinars called *ENRIITC your Knowledge* and to link them to the ENRIITC your Coffee series by using the same time slots (Thursdays, 15:00). The graphic design is depicted below:

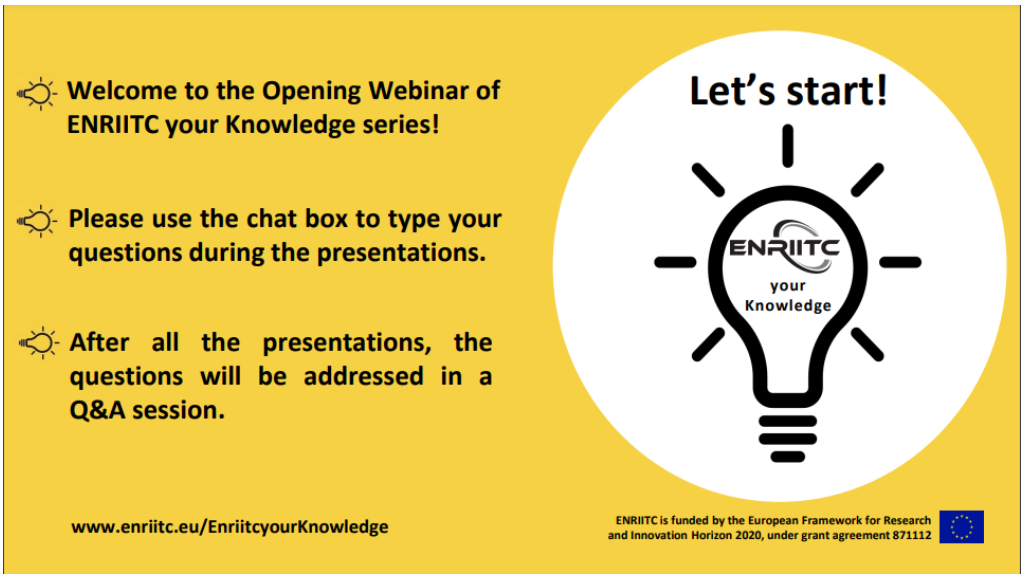

Figure 2 - ENRIITC your Knowledge branding

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Figure 3 - ENRIITC your Knowledge branding

For webinar #8, due to its collaborative approach, together with WP5 it was decided to rebrand the episode to *ENRIITC our Knowledge* to stress this collaborative approach:

Figure 4 - ENRIITC our Knowledge branding (Webinar #8)

All the webinars were organised in meeting mode to foster interactivity and were recorded. Presentations and full recordings have been uploaded to the ENRIITC webpage for open access to ILOs and ICOs. The webinars were widely promoted using the ENRIITC digital media and shared across all the ILO/ICO community.

Technical details as follows:

- Videoconferencing software: Zoom in meeting mode with online poll option
- Registration platform: ENRIITC Indico webpage for #1-#4, Zoom built-in registration form for #5-#8
- Post-webinar surveys: Microsoft Forms and Zoom surveys

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3. Description of the webinar series

This section describes the structure, moderator, speakers and purpose for the complete series, including the promotional information for ILOs and ICOs and intedted learning outcomes.

3.1. Webinar #1: The ILO and ICO roles for beginners

Title	The ILO and ICO roles for beginners
Training type	Webinar
Date & time	27 May 2021, 15:00 – 16:30
Duration	1,5 hours
Location	Online
Audience	ILOs, ICOs across all domains and anybody interested in building bridges between research infrastructures and industry
Scope	This first webinar in the series will be exploring the role of Industry Liaison Officers (officially appointed by the member states and associated countries to stimulate the collaboration amongst the national industry and the international RIs) and Industry Contact Officers (research infrastructures staff in charge of developing business relations with all potential industrial suppliers and users) paving the way for future synergies and collaborations between these two key roles of the ENRIITC project. Different ILOs and ICOs will present their views on their role and key performance indicators.

Table 5 - Webinar #1 description

Why should you join?

After this webinar, participants will be able to

- Gain experience on how ILOs and ICOs work to involve industry as a supplier, user and co-creator of research infrastructures.
- Understand the basic roles and responsibilities and wide organisational variety of ICOs across the ESFRI roadmap.
- Learn how Big Science research infrastructures ILOs work, their objectives and main key performance indicators.
- Grasp similarities and complementarities in the ways ILOs and ICOs work, paving the way for new collaborations between them

Intended learning outcomes

- Describe the key responsibilities and tasks of ILOs & ICOs
- Recognise that semantics of ILOs & ICOs are less clearly defined outside of ENRIITC
- Recognise that in different contexts, industry can be the supplier, user or technology transfer partner.

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Agenda, moderator and speakers:

Moderator: Nigel Wagstaff, EATRIS - Advisor Innovation Support

Speakers:

- Chris Tieken , EATRIS – Business Development Manager –– *ICOs roles and responsibilities in the ESFRI Health domain.*
- Franciska de Jong, CLARIN ERIC – Executive Director– *Industry relations in the ESFRI domain of Social & Cultural Innovation*
- Javier Echávarri, CDTI E.P.E (Spain) – ILO from Spain for ESO and SKA – *Understanding the ILO role from the perspective of a governmental agency*
- Gerard Cornet, ILO-NET (the Netherlands) – Coordinator of Network Industrial Liaison Officers – *The experience of network of ILOs belonging to public research organisations*

3.2. Webinar #2: The basics of physical brokerage events for first-time organisers

Title	The basics of physical brokerage events for first-time organisers
Training type	Webinar
Date & time	June 10, 2021 – 15 :00 – 16 :30 CET
Duration	1,5 hour
Location	Online
Audience	ILOs, ICOs
Scope	Physical events bring together key representatives from research infrastructures and industry, but they can be quite challenging to organise. ILOs and ICOs setting up these events must plan them seamlessly to ensure that representatives from both industry and research infrastructures make the most out of their participation. In this webinar experienced ILOs and ICOs from the ENRIITC project will lay out the key aspects, tools and processes to be considered when organising these physical events whose scope can vary between large face to face brokerage events and more thematic workshops, allowing less experienced ILOs and ICOs to learn about the key elements to ensure interaction between industry and research infrastructures.

Table 6 - Webinar #2 description

Why should you join?

After this webinar, participants will be able to

- Understand the different features of a face to face brokerage event
- Identify the activity streams and timelines involved in organising such events.
- Recognise risks and pitfalls to avoid during the planning and execution
- Obtain a clear understanding of the mechanics and key issues to organise successful physical events.
- Learn about the call for associate members of ENRIITC to organise brokerage events

Intended learning outcomes

- Understand the different features of a face to face brokerage event
- Identify the activity streams and timelines involved in organising such events.
- Recognise risks and pitfalls to avoid during the planning and execution
- Obtain a clear understanding of the mechanics and key issues to organise successful physical events.
- Learn about the call for associate members of ENRIITC to organise brokerage events

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Agenda, moderator and speakers:

Moderator: Jorge López, CDTI, E.P.E. – ILO for national research infrastructures

Speakers:

- Jorge López, CDTI E.P.E. – *Key aspects to the organisation of Big Science Business Forum 2022 as an example of a large-scale, face to face brokerage event*
- Nikolaj Zangenberg, Danish Technological Institute – *Lessons learned during the organisation of BSBF2018 and other industry as a supplier events*
- Caroline Boudou, ILL – Industry Contact Officer – *The basics to setting up a brokerage event for industry as a user of a research infrastructure*
- Claudia Pfander, EURO-BIOIMAGING – Industry Board Coordinator – *Technical workshops: building business relationships through shared interests*
- Ed Mitchell, ESRF - Head of Business Development Office –*Call for organisation of brokerage events by ENRIITC associate members*

3.3. Webinar #3: Industrial impact in the Big Science market after one year of COVID pandemic

Title	Industrial impact in Big Science market after one year of COVID pandemic
Training type	Webinar with exchange of experience workshop]
Date & time	18 June 2021 – 10:00 CET
Duration	2 hours
Location	Online
Audience	Mainly ILOs+ some representatives of Big Science Organisations -ICOs
Description	How has the Big Science market changed after more than one year of pandemic? In this *ENRIITC your Knowledge* webinar jointly organised by PERIIA & ENRIITC , participants will have the opportunity of having a look at the different Big Science Facilities measures adopted to mitigate the pandemic repercussions and will discuss about the initial assessment on the impact for industries involved in Big Science. The outcome of the "COVID-19 impact on Big Science industry questionnaire" addressed to the ILO´s network, will also be revealed. Furthermore we will discuss some common proposals to be addressed to institutional stakeholders in order to support industrial participation in Big Science during COVID era.

Table 7 - Webinar #3 description

Why should you join?

Participants should register if they´re interested in having a look at the different Big Science Facilities measures adopted to mitigate the pandemic repercussions and discuss about the pandemic impact on Big Science industry.

The summary report of the "COVID-19 impact on Big Science industry questionnaire" addressed to the ILO´s network, will also be revealed and a common set of proposals to be addressed to institutional stakeholders supporting industrial participation in Big Science market during COVID era, will be agreed.

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Intended learning outcomes

- Understanding about the different measures put in place by some Big Science research infrastructures in light of the COVID-19 pandemic.
- Set of ILOs common proposals
- Summary report about the "COVID-19 impact on Big Science industry questionnaire"
- Q/A session Mentimeter pool

Agenda, moderator and speakers:

Moderator: Paolo Acunzo, ENEA - ILO for F4E/ITER and PERIIA Chair

Speakers:

- Belén del Cerro, CDTI - ILO for F4E/ITER, PERIIA Deputy chair: *Presentation of questionnaire results*
- Mirko Menninga, ESS - Head of Supply, Procurement & Logistics Division: *Impact of COVID 19 measures adopted by ESS*
- Anders Unnervik, CERN - Head of Procurement and Industrial Services Group: *Impact of COVID 19 measures adopted by CERN*
- Franck Germes, ESA - Head of Earth Observation, Navigation and Telecommunication Procurement Division*: Impact of COVID 19 measures adopted by ESA*
- Leonardo Biagioni, F4E - Deputy Chief Financial Officer: *Impact of COVID 19 measures adopted by F4E*
- Nikolaj Zangenberg, DTI Centre Manager and ILO for CERN, PERIIA Board - *Round table moderator of COVID-19 measures by Big Science organisations*
- Anna Hall, Big Science Sweden, ILO for ESS, PERIIA Communication: *Discussion on common proposals*
- Toon Verhoeven, Big Science Netherlands, PERIIA Board: *Approval of the set of ILOs common proposals*

3.4. Webinar #4: Tips & Tricks to organise interactive digital events with industry and research infrastructures

Title	Tips & Tricks to organise interactive digital events with industry and research infrastructures
Training type	Webinar with exchange of experience workshop
Date & time	21 June 2021, 15:00–17:00 CET
Duration	2 hours
Location	Online
Audience	ILOs, ICOs across all domains and anybody interested in building bridges between research infrastructures and industry
Scope	During the last year we have seen a heavy trend in events taking place in the digital world, with these new digital dynamics likely to continue in the future. In this interactive webinar, experts across several RI domains will share their experiences, practical information and insights on how to organise interactive and engaging online events: workshops, and trade fairs coupled with B2B sessions. Participants have the opportunity to exchange experiences during an interactive session in the second half of this webinar.

Table 8 - Webinar #4 description

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Why should you join?

This webinar and exchange of experience workshop will provide you with practical tips and tricks on how to make digital events truly interactive and exchange ideas with your peers. After this webinar, you will be able to:

- Recognise that interactivity can be realised in digital formats
- Use the step by step guide on industry/RI collaboration created by ENRIITC
- Describe how different tools support interactivity
- Identify the steps needed when transforming a face-to-face event to a digital event
- Enhance proficiency in organising digital events with industry
- Apply to the call for associate members of ENRIITC to organise brokerage events and thus explore through trialing during the ENRIITC project

Intended learning outcomes

- Recognise that interactivity can be realised in digital formats
- Use the step by step guide on industry/RI collaboration created by ENRIITC
- Describe how different tools support interactivity
- Identify the steps needed when transforming a face-to-face event to a digital event
- Enhance proficiency in organising digital events with industry
- Apply to the call for associate members of ENRIITC to organise brokerage events and thus explore through trials during the ENRIITC project

Agenda, moderator and speakers:

Moderator: Nigel Wagstaff, EATRIS - Advisor Innovation Support

Speakers:

- Rebecca Ludwig, EATRIS – *How to ensure interactivity in digital events*?
- Jorge López, CDTI E.P.E. – *Key topics and tips organising online webinars with B2Bs at BSBF and CDTI*
- Kurt Burtscher, B2Match – *How did the B2Match event management platform adapt to fully online or hybrid events?*
- Anne-Charlotte Joubert, ESS – ENRIITC Project Manager –*Call for organisation of brokerage events by ENRIITC associate members* (TBC)

Exchange of experience

Sharing simple tips & tricks towards implementation and brainstorm on common challenges, with three breakout rooms:

- Breakout room 1: How to foster interaction among participants
- Breakout room 2: Video conferencing & collaboration tools
- Breakout room 3: How to keep attention of participants

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3.5. Webinar #5: Strategies for SME interaction and participation in brokerage events

Title	Strategies for SME interaction and participation in brokerage events
Training type	Webinar
Date & time	14 October 2021, 15:00–16:30 CET
Duration	1.5 hours
Location	Online
Audience	ILOs, ICOs across all domains and anybody interested in building bridges between research infrastructures and industry
Scope	The objective of the webinar is twofold: on the one hand examine how ILOs and ICOs can interact with SMEs: strategies, success stories, etc. The second objective is to provide practical information on how to maximise SME participation in an event/trade/fair/interaction with industry going step by step on all what is needed to prepare before, to do during, and to do after a brokerage/networking event.

Table 9 - Webinar #5 description

Why should you join?

This webinar will help you understand the best way to interact with SMEs, sharing common experiences and approaches, success stories, etc. and provide guidance to ILOs on ICOs on what is the best way for SMEs to maximise their participation in brokerage events, both from RI business developer and SME point of views.

Intended learning outcomes

- Create sustained awareness of best practices in matchmaking between RIs and SMEs.
- Raise awareness in SMEs and RIs of possible interaction, and lower the threshold.
- Describe the different networking formats (meet the scientist, formal brokerage events, informal exchange over phone, email and social media)
- Recognise that targeted preparation is required for successful networking
- Implement preparation techniques for upcoming networking formats

Agenda, moderator and speakers:

Moderators: Lauranne Duquenne, EATRIS – Training Manager & Anne-Charlotte Joubert, ESS – ENRIITC Project Coordinator

Speakers:

- Ali Aït-Ikhlef, NeurATRIS – *RIs and SMEs interactions: role of ICOs and ILOs*
- Marco Straccia, FRESCI
- Miguel Angel Carrera, AVS
- Piotr Bielówka, Techtra

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3.6. Webinar #6: Exploring new avenues for ILOs – knowledge transfer to industry and use of research infrastructures

Title	Exploring new avenues for ILOs – knowledge transfer to industry and use of research infrastructures
Training type	Webinar + interactive
Date & time	25 November 2021 CET, 15:00 – 16:30
Duration	1,5 hours
Location	Online
Audience	National appointed Industry Liaison Officers for Big Science RIs (CERN, F4E, ESO, ESRF, etc.)
Scope	ILOs are appointed by their governments with the mandate of supporting their national industry as a suppliers to Big Science Organisations. Being nationally based, they have good connection to their national industries, clusters and associations. However ILO implication is less common in knowledge transfer and sporadic in supporting industry as a user of RIs. What industrial sectors do Big Science RIs target as users? How do they approach them? In which ways and what are the main channels to foster knowledge transfer to industry fostered in Big Science RIs? And how could ILOs get more involved in these areas of work? This webinar will provide information to ILOs about these topics and aims to be the starting point for a discussion on the nature of the ILO role and its potential involvement in untapped areas of work. The webinar will be broken down in two parts: in the first one speakers from prominent Research Infrastructures will provide practical information about how they endeavour to target industry as a user and foster knowledge transfer, and in the second there will be discussion rooms where participants will exchange their experiences and views.

Table 10 -Webinar 6 description

Agenda and speakers

Giovanni Anello, CERN – Head of Knowledge Transfer Unit - *The example of CERN Knowledge transfer services*

Ed Mitchell, ESRF - Head of Business Development Office – *An introduction to industrial access to ESRF beamlines: what are the industries and how are they approached*

Antonio Bonucci, European XFEL (TBC) – In-Kind Contributions Supply Chain Manager & Industrial Liaison Officer - *Management of industrial research at the European XFEL*

Why should you join?

After this webinar, participants will be able to

- Learn how Big Science organsiations in the area of Physical Sciences and Engineering foster knowledge and technology transfer and gain access to related experiences by involved ILOs.
- Understand what industrial sectors are targeted by Big Science RIs and what are the strategies these organisations follow to promote their industrial use.
- Discuss and exchange ideas about potential ILO involvement in the domains of knowledge transfer and industrial use or Big Science Research Infrastructures.

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3.7. Webinar #7: Resolving issues on the path to public-private collaboration

Title	Resolving issues on the path to public-private collaboration
Training type	Webinar
Date & time	24 February 2022 CET, 15:00 – 16:30
Duration	1,5 hours
Location	Online
Audience	ICOs, ILOs and others involved with setting up successful collaborations between industry and research infrastructures which address issues of importance to both RIs/academia and industry partners: IP, publication, ownership, use rights, licensing
Scope	The webinar will explore the issues which can arise in setting up industrial-RI collaborations and draw lessons from the experience of the speakers and participants as to how these can be addressed and resolved. Various types of collaborations in the domains of industry as a user of RIs and co-creator will be dealt with, ranging from pre-competitive to licensing and spin off companies. Approaches to intellectual property, publication and use rights/licences will be described against the background of the objectives and requirements of the parties. Speakers will give examples from their experience of what can aid and what can hinder successful collaboration and tips on how to achieve balance and harmony. The webinar will also give suggestions on the best sequence in which to deal with issues whether they are scientific/technical, commercial or legal/contractual. Approaches to secrecy, material transfer and collaboration legal frameworks will be outlined.

Table 11 - Webinar #7 description

Agenda and speakers

- Laura MacDonald, Chief Executive of the Association of European Science and Technology Transfer Professionals, ASTP
- Martin de Kort, EATRIS Senior Scientific Programme Manager
- Tamara Carapina, EATRIS Senior Legal Counsel
- Victor Sáez, Head of the Market Analysis Group, Fusion for Energy, F4E

Why should you join?

After this webinar, participants will be able to

- Operate more confidently and professionally in setting up various types of collaborations
- Appreciate the objectives of the public and private parties
- Understand the interplay between the various actors (legal, commercial, funding, scientific) belonging to industry and research infrastructures and involve the right people at the right time
- Understand the various issues involved in setting up collaborations and adopt creative win-win approaches
- Identify fields where further training and specialisation is necessary
- Identify where to find help/resources

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3.8. Webinar #8: Broadening the scope towards an enhanced ENRIITC ILO & ICO network

For the final webinar of the series, it was decided to adopt a more collaborative approach, where the classic webinar with 3-4 speakers was replaced by a collaborative endeavour in the ENRIITC ILO&ICO community were asked to share their success stories, experiences or innovative approaches dealing with the topics included in the table below. A call for proposals was launched prior to the webinar to recruit ILO&ICO speakers across all ESFRI topics to deliver flash presentations. This idea stemmed from the general feedback that one of the values of ENRIITC is to serve as a platform To share ILO/ICO success stores and learn from each other.

Title	Broadening the scope towards an enhanced ENRIITC ILO & ICO network Towards a broader and enhanced ENRIITC ILO & ICO network
Training type	Webinar + interactive
Date & time	12 May 2022 CET, 15:00 – 16:30
Duration	1,5 hours
Location	Online
Audience	Industry Liaison Officers, Industry Contact Officers, and other relevant actors across all ESFRI domains.
Scope	The ENRIITC network of ILOs and ICOs enables mutual learning, maps collaboration potential between RIs and industry, develops and refines strategies and best practices to foster these collaborations, raises awareness among industry for collaboration opportunities at research infrastructures, and demonstrates impact. This is a great challenge when we are working across different ESFRI domains, cultures and work environments (scientific, technical, business development….). The structure of the webinar is to share ILO &ICO endeavours and success stories dealing with how to lower barriers in order to enrich our network through collaboration and new services. We want to draw on your experiences on the following topics: • *How have you engaged with interest from new angles, using innovative approaches?* • *What have been the drivers, success, barriers and failures of your recent initiatives for RI-industry collaboration?* • *What would be the characteristics of an ideal brokerage event or RI-industry collaboration?* • *How have you involved industry not previously engaged with Ris in the user or supplier side?* • *How have you helped bridge different ESFRI domains?* • *What ILO/ICO collaboration initiatives have proved successful to provide added value to RIs and industry?* • *How have you overcome communication or cultural barriers to provide a better service?* ILOs and ICOs willing to share their experiences are invited to participate in the webinar flash presentations, which will provide food for thought for discussions regarding the evolution of the ENRIITC network. Let's learn from each other! Please contact enriitc@ess.se

Table 12 - Webinar #8 description

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Why should you join?

After this webinar, participants will be able to

- Benefit from knowledge of what others have done to overcome cultural, communication or cross-fertilisation barriers to improve RI-industry collaboration
- Learn about and apply initiatives which have worked in other ILO/ICO endeavours.
- Identify potential collaborations with fellow ILO/ICOs from the ENRIITC project.

Agenda and speakers

As a results of the call for speakers, the agenda consisted on the following flash presentations:

#	ILO/ICO	Topic	Speaker
1	Big Science Sweden	*Pan-European partnering and industry involvement in Big Science*	Anna Hall
2	INSTUCT-ERIC	*Instruct-ERIC reaching to Industry users: lessons learned from our pilot event*	Pauline Audergon
3	INDUCIENCIA	*Main findings of first brokerage event with national research 26nfrastructure network and industry*	Erik Fernández
4	DARIAH-CLARIN	*Lessons learnt from the SSH Industry Outreach Workshop*	Iulianna van der Lek
5	Swiss ILO Office	*ESO ILO-organised brokerage event: keys to success*	Michel Hübner
6	EATRIS	*Artificial Intelligence and Machine Learning in Health Care*	Nigel Wagstaff
7	CERIC-ERIC	*Research and Industry: building the relationship from a Research Infrastructure Consortium´s perspective*	Angela Zennaro
8	WPT	*Defining the ENRIITC training strategy: conclusions from industry interviews*	Sylwia Wojtowicz
9	EMSO	*EMSO Time Series Conference 2021 – How to involve industry in training*	Marco Galeotti
10	CDTI	*New approaches to collaboration: PRISMAC (High Field Superconducting Magnets Programme)*	Belén del Cerro
11	PRACE	*Scientific Discovery and Industrial R&D through High Performance Computing*	Wahid Rofagha
12	Danish Teknologisk Institut	*Collaborating with competitors – the story of PERIIA*	Nikolaj Zangenberg
13	ESRF	*Working with industry as a user – seismic changes with COVID*	Ed Mitchell

Table 13 - Webinar #8 flash speakers

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4. Results and discussion

In this section we present the webinar results and discussion. conclusions of the breakout rooms and/or Menti sessions for those webinars with interactive section.

There were a total of 291 registrations from ILO, ICOs, business development officers and other representatives from RIs to the entire series of webinars, with 244 participants and a no-show rate of 16% which is considered a positive indicator. Appendix I contains the list of registrees for each session. The following chart shows how participants heard of them:

Figure 5 - How did you learn from the webinar series?

The graph shows that the most effective means of communication was the ENRIITC newsletters (45%), followed by word of mouth (21%) social media (16%). 11% of the participants in the webinars were actual members of ENRIITC.

In order to evaluate each webinar and improve for further sessions, a training evaluation form was sent out (see Appendix II). Results are also presented for each webinar.

4.1. Webinar #1: The ILO and ICO roles for beginners

The number of registrees to Webinar #1 was 47 and the number of actual connected participants was 31, making the no-show percentage 34%.

The majority of participants in the events were ICOs (41%), followed by other representatives from RIs with different functions (38% project managers, training managers, researchers, etc.) and 21% of ILOs:

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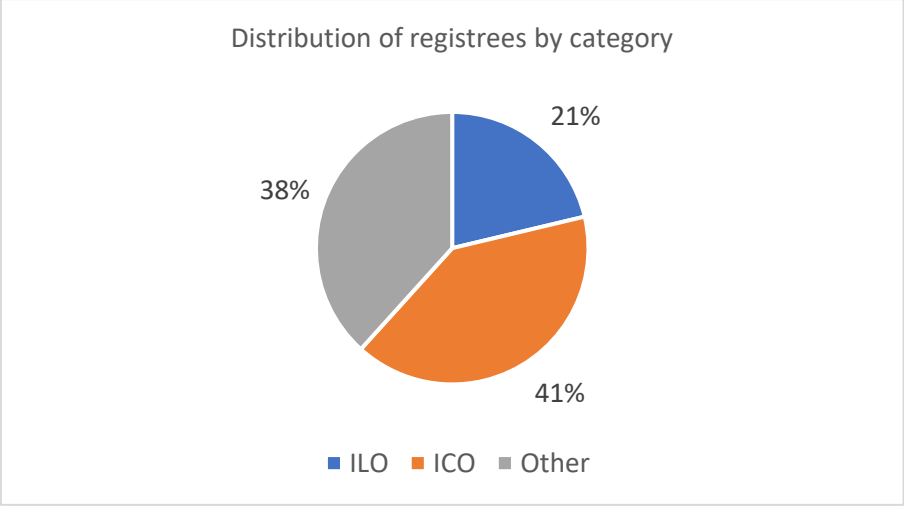

Figure 6 - Webinar #1 distribution of registrees by category

Regarding the distribution by ESFRI domain, all of them were represented although a significant number of the attendees belong to Physical Science and Engineering. This is a logical result, as the ILO figure is only existing in the Big Science RIs like CERN, ESRF, ITER, ESO, etc. all of which correspond to the ESFRI domain of Physical Sciences and Engineering except ITER which belongs to Energy, although it is strongly linked to Physical Sciences and Engineering.

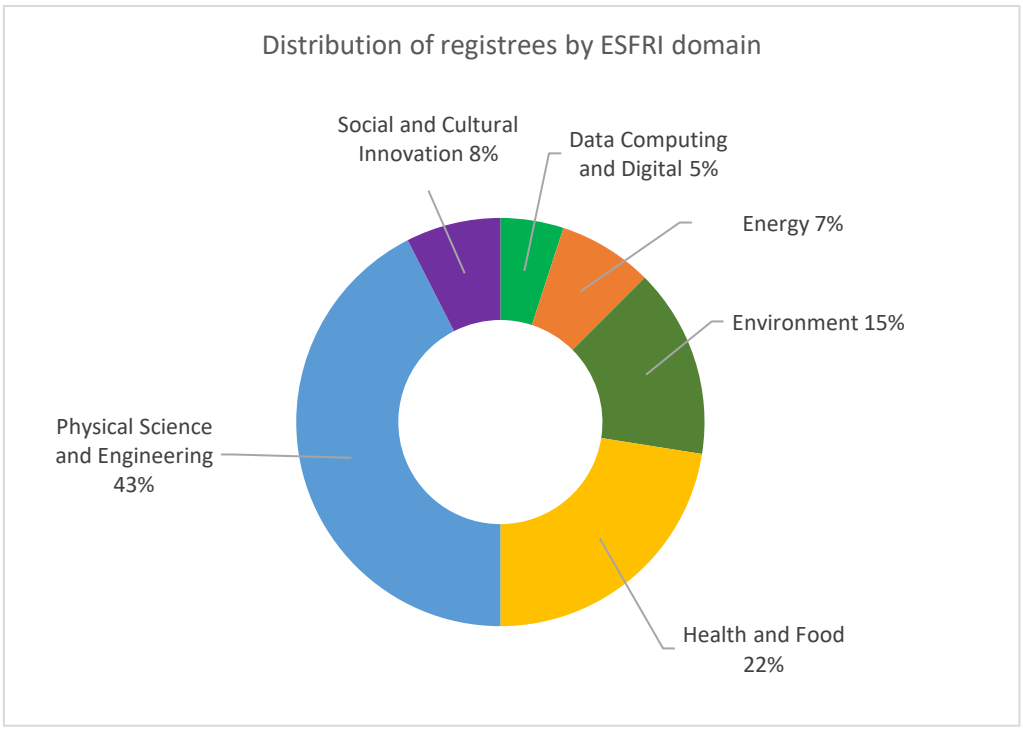

Figure 7 - Webinar #1 distribution of registrees by ESFRI domain

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During the event an online poll was launched, which yielded the following results:

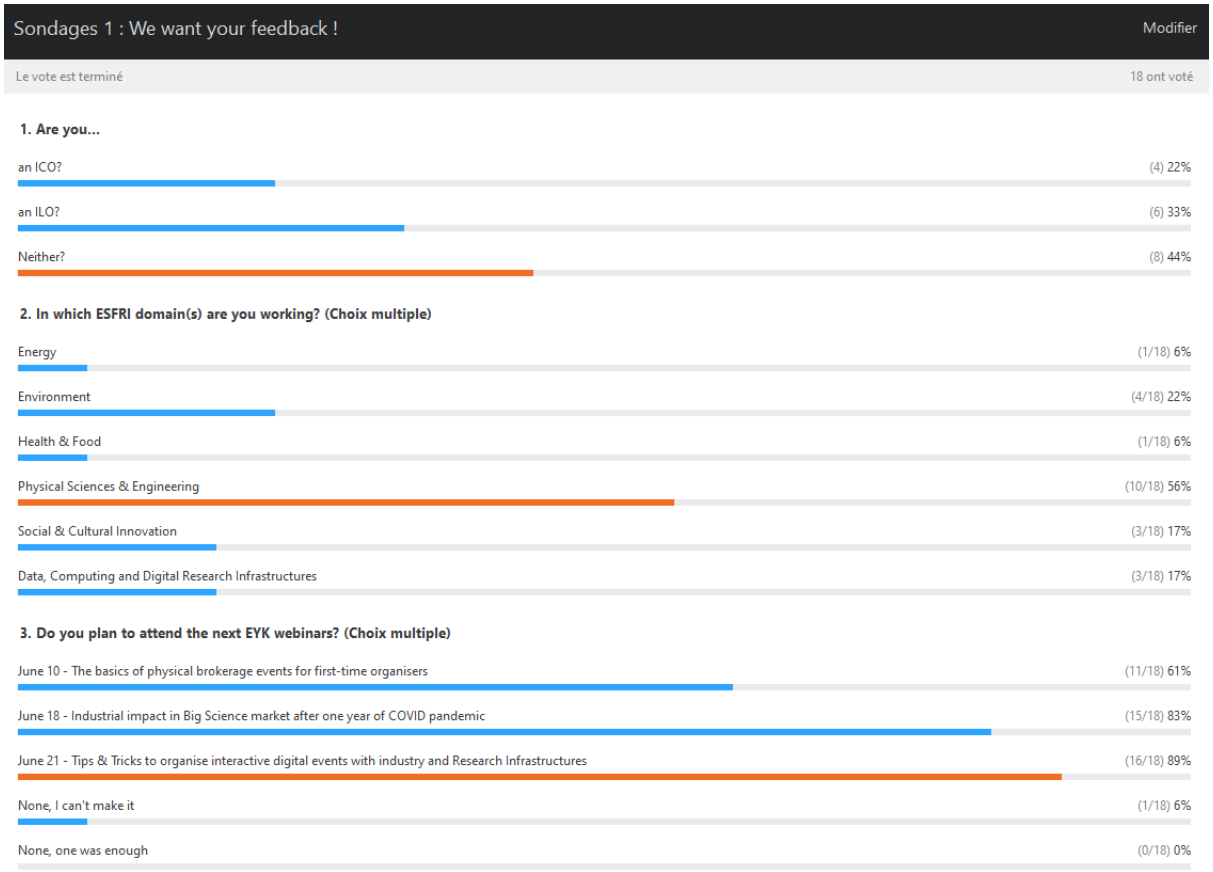

Figure 8 - Webinar #1 online poll

Some remarks on the online poll:

- Participants on the ICO side identified themselves more in the “Other” category, which shows that the ICO role is very diverse and not always the staff from RIs with a role in liaising with industry are identified as such.
- Distribution across the ESFRI domains is quite similar to the data extracted from the registree information.
- Feedback for attendance in future webinars was mostly positive, with most interest for receiving practical tips for organising digital brokerage events.

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Following the webinar, a survey was sent to evaluate the results, to which 14 participants responded, as follows:

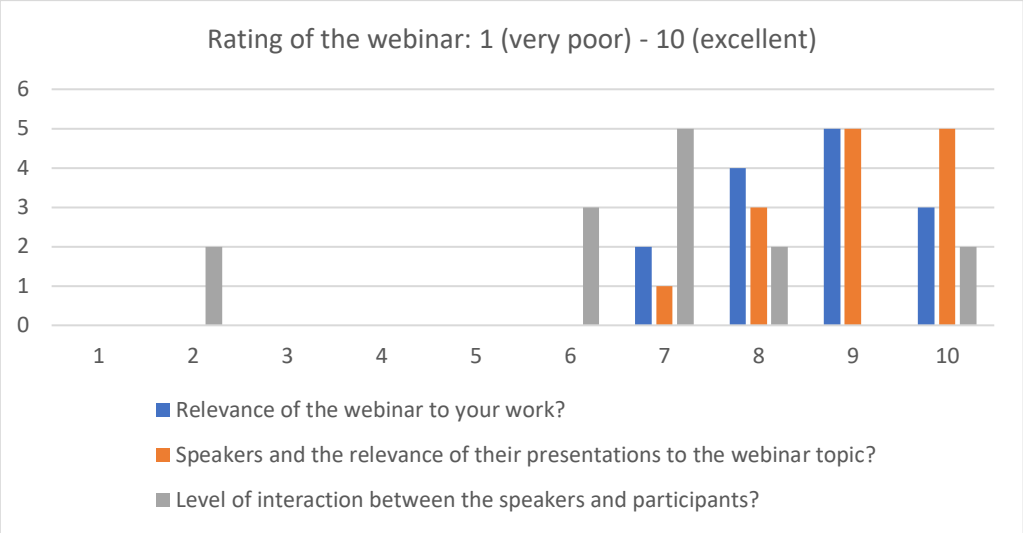

Figure 9 - Webinar #1 rating

The average grades were the following:

- Relevance of the webinar to your work: 8,6
- Speakers and the relevance of their presentations to the webinar topic: 9
- Level of interaction between the speakers and participants: 6. This was clearly the aspect to be improved for future editions.

Regarding the duration of the webinar, 85% of the participants responded that the duration was appropriate.

Participants were also asked to comment on what they would improve for further sessions:

- *Trying to engage the participants to be more active during the event.*
- *Some practical information on how to do things*
- *I like the use of Menti for example to get an idea of the background of the audience also I think a poll about a possibly somewhat provocative statement can trigger a more lively discussion*
- *Involve participants to make questions. Create a tour de table between speakers after presentations and prior to the open Q&A session.*
- *More opportunity for discussion, perhaps by posing statements*
- *More interaction with the participants through involving them earlier and maybe using Mentimeter or such.*
- *Speakers should use the same EYK background image and improve their illumination in front of the camera.*

Participants clearly reacted expressing the need for more interaction during the session. Regarding possible topics, suggestions were as follows:

- *Governance and relations among BSOs*
- *A view inside the Business forum (University and Big Science). How do they work? How successful are they?*
- *Technology transfer session, session on industry needs and requests*
- *Identifying common ground for ICOs and ILOs*
- *An interactional workshop with ILOs and ICOs to exchange experience and enhance innovation.*

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4.2. Webinar #2: The basics of physical brokerage events for first-time organisers

The number of registrees to Webinar #2 was 40 and the number of actual connected participants was 35, making the no-show percentage 13%.

The majority of participants in the events were ICOs (43%), followed by other representatives from RIs with different functions (project managers, training managers, researchers) and 26% of ILOs:

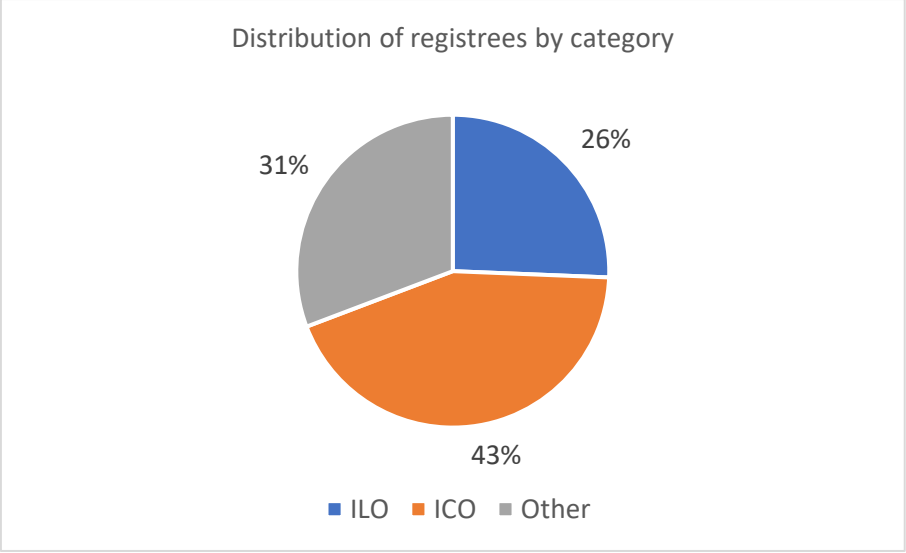

Figure 10 - Webinar #2 distribution of registrees by category

Regarding the distribution by ESFRI domain, all of them were represented, although the percentage of attendees from Physical Science and Engineering was even greater than in the first webinar:

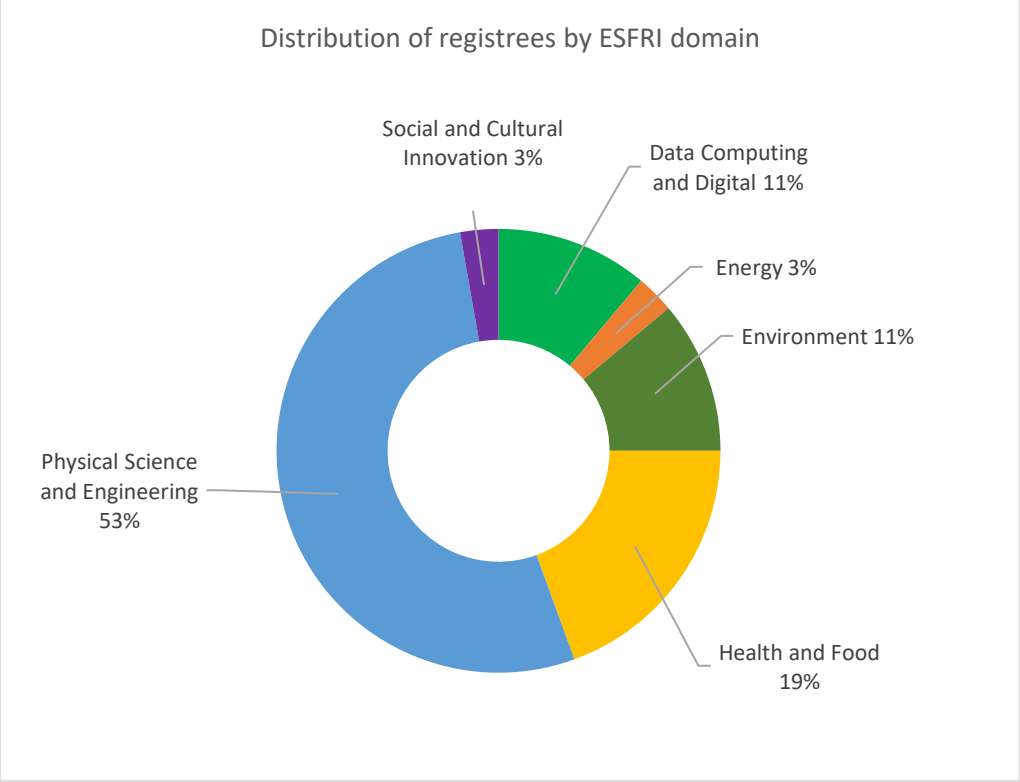

Figure 11 - Webinar #2 distribution of registrees by ESFRI domain

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During the event an online poll was launched, which yielded the following results (11 replies):

- ILOs (45%), ICOs (18%), Other (27%).
- Most of the respondents were interested in attending both of the remaining webinars of the two series.
- 63% of the participants belonged to Physical Science and Engineering.

Following the webinar, a survey was sent to evaluate the results, to which 12 participants responded, as follows:

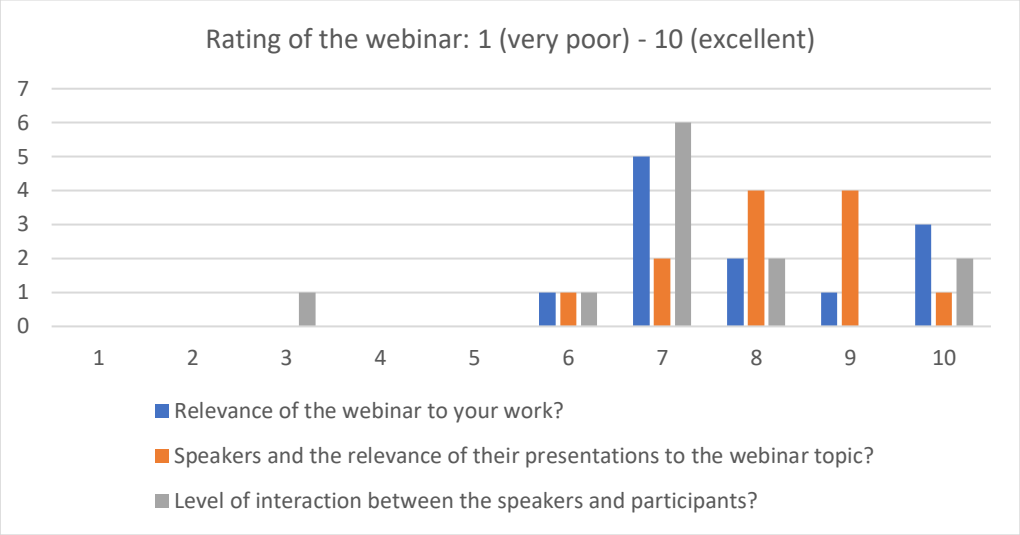

Figure 12 - Webinar #2 rating

The average grades were the following:

- Relevance of the webinar to your work: 8
- Speakers and the relevance of their presentations to the webinar topic: 8,2
- Level of interaction between the speakers and participants: 7,3. Although there is still room for improvement, the level of interaction compared with the previous webinar improved its rating considerably.

Regarding the duration of the webinar, 83% of the participants responded that the duration was appropriate.

Participants were also asked to comment on what they would improve for further sessions:

- *Find ways to provoke more discussion.*
- *To keep the time schedule*
- *Have some round tables?*
- *Perhaps a bit shorter with not more than two presentations!*
- *I felt this webinar was an improvement over webinar #1. There was more interaction and discussion. Speakers were focused and overall it was a good experience.*

Increasing interaction and keeping presentations focused and on-time seemed to be the major concern. Regarding possible topics for future sessions, suggestions were as follows:

- *To focus on the participation of researchers. Industrial Exhibitions have a great success if the the participation is enlarged to the researchers.*
- *Link ILO and ICO. Promote innovative buy. Brainstorm on "market build" around disruptive technology from big science.*
- *I just have attended one and I'll try to participate in the two more to follow, then one will see.*

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4.3. Webinar #3: Industrial impact in the Big Science market after one year of COVID pandemic

Webinar#3, devoted to the impact of the COVID-10 pandemic to the Big Science market, was organised by PERIIA in the context of ENRIITC.

The number of registrees to Webinar #3 was 43 and the number of actual connected participants was 43, making the no-show percentage 0%.

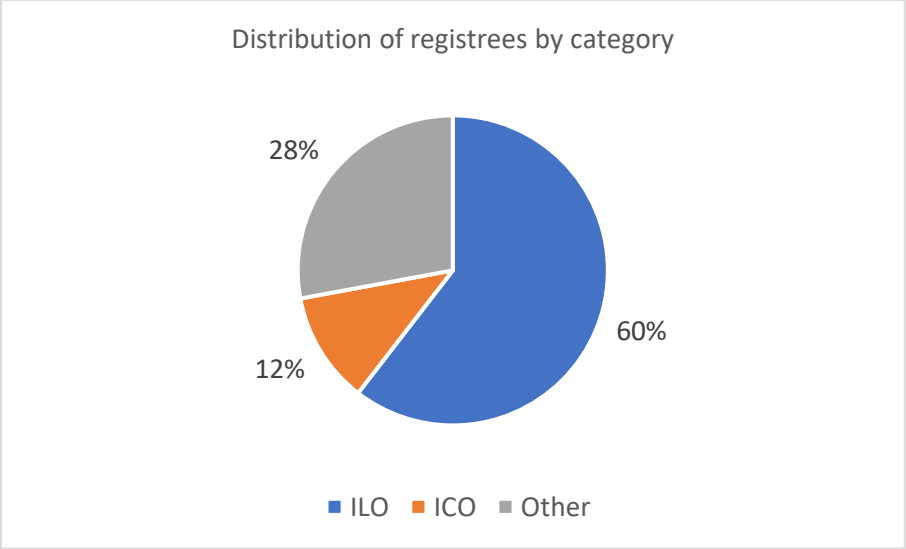

Figure 13 - Webinar #3 distribution of registrees by category

Regarding the distribution by ESFRI category, statistics correspond to the fact that this webinar was devoted to industry as a supplier in Big Science organisations, so Physical Science and Engineering is predominant as well as participation of ILOs.

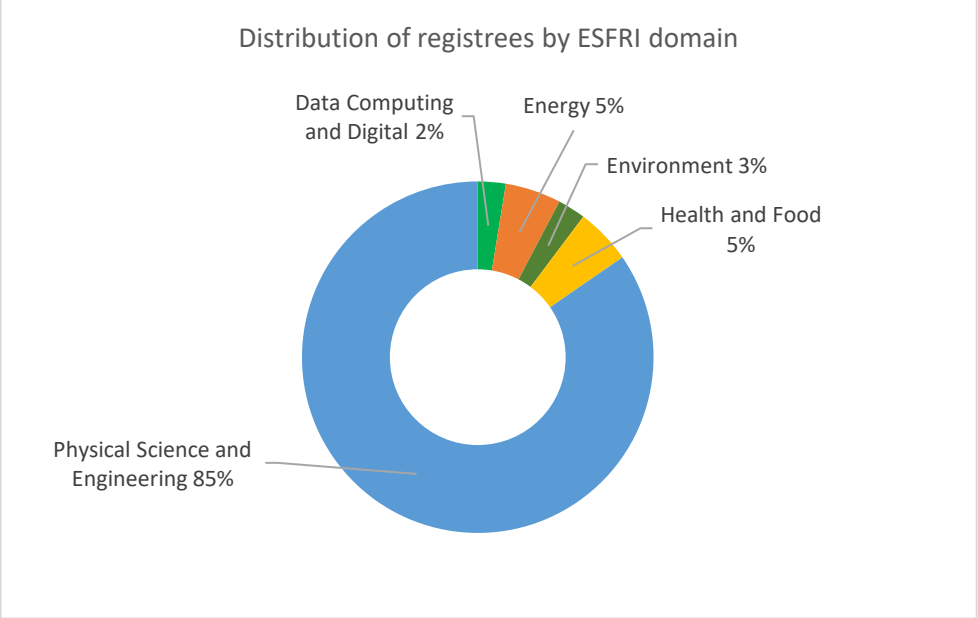

Figure 14 - Webinar #3 distribution of registrees by ESFRI domain

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Webinar #3 had a different structure than the first two. In order to analyse the impact of COVID-19 in the European Big Science market, a questionnaire was made public to all the ILO community and was discussed during the session. Appendix II includes the questionnaire and the results.

Based on the results obtained from the questionnaire, a set of common proposals to mitigate the impact of the COVID-19 pandemic and its economic consequences was developed by the PERIIA board, as follows:

Market:

1. Develop a common business market of Big Science in Europe
2. Identify activities to maximise SMEs access into the Big Science market
3. Increase the universal visibility of the otherwise rather fragmented Big Science market;
4. Create a forum for sharing success stories and exchange of experiences among national ILOs working with different BSOs.

Funding:

5. Define specific requirements of Next Generation EU and other European funds in order to support Big Science industry throughout national/international emergencies
6. Develop Financial support mechanisms to support companies involved in Big Science in Europe
7. Financial support for employment retention
8. Subsidise the investments necessary to prepare large and/or complex procurement activities for Industry in Big Science

Procurement:

9. Make available a universal & free software package to enable online matchmaking events for business
10. Simplified procurement process for low value order.
11. Encourage harmonisation of big science organisations purchasing practices, processes and procurement rules
12. Encourage harmonization of big science organisations tender codes, through the establishment of a Codes Committee.
13. Develop a set of cross sector metrics for technology transfer.

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In a subsequent Menti session, all the participants were asked to give their comments on the measures, yielding the following outcome:

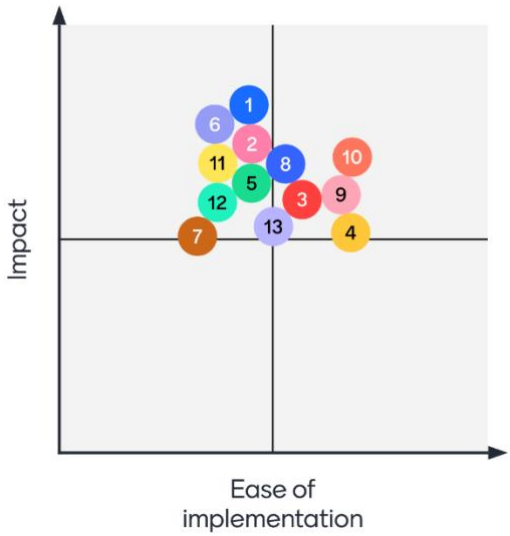

Figure 15 - Webinar #3 special measures for the Big Science market – impact and ease of implementation

The measures which ILOs considered to have a greater impact are developing a common business market of Big Science in Europe, introducing financial support mechanisms aimed at companies involved in Big Science in Europe and special measures to support SMEs. However these three measures were not perceived as easy to implement. Other measures, which are easier to implement and could have considerable impact are the following: simplifying the procurement process for low value order contracts, subsidising the investments necessary to prepare large and/or complex procurement activities for Industry in Big Science, the availability of a universal and free software package to enable online matchmaking events for business and increasing the universal visibility of the Big Science market.

In all, participants were asked to rank the proposals in terms of relevance, with the following results:

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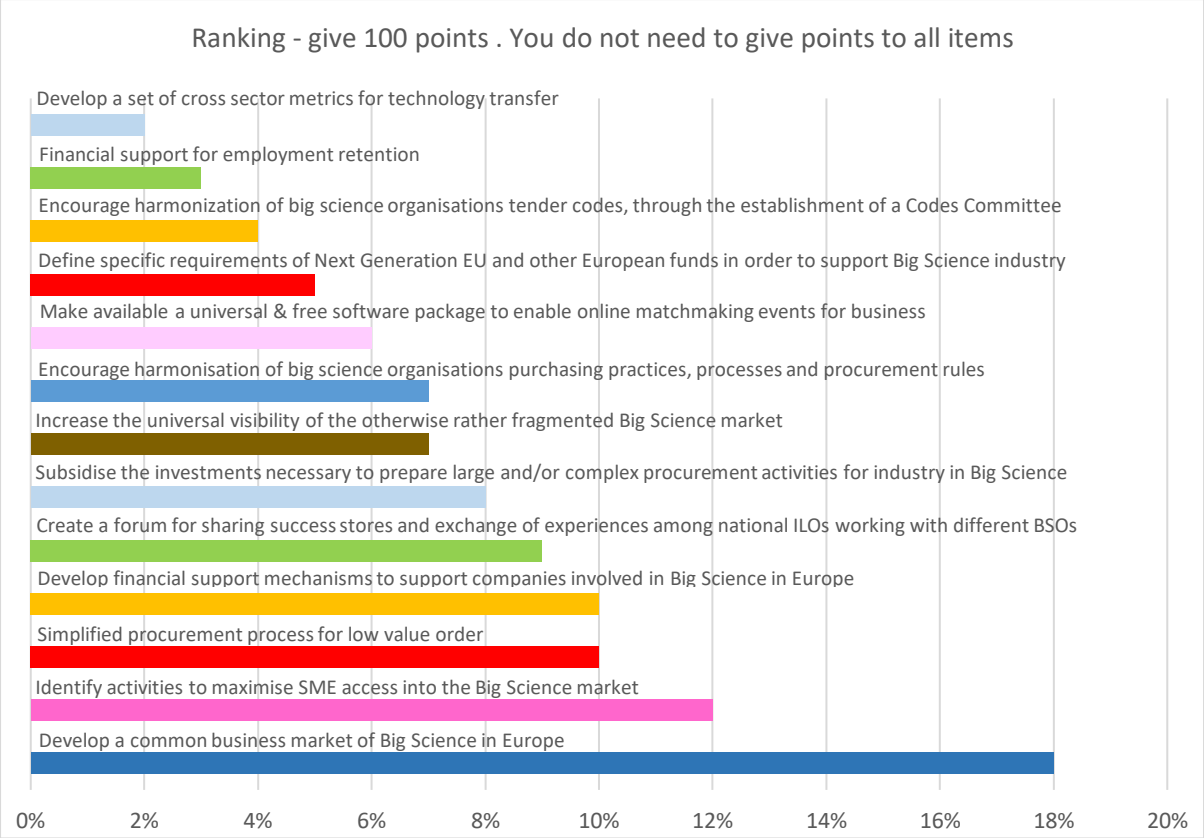

Figure 16 - Webinar #3 special measures for the Big Science market – ranking

The most relevant proposal was decided to be the development of a common Big Science market in Europe, followed by SME support through special measures and the simplification of low value order procurement processes. Other measures which were voted as significant were the development of funding mechanisms to support Big Science companies, creating a forum to exchange best practices and success stories between ILOs and the possibility of subsidies to fund the preparation of bids for large or complex contracts.

Measures which were considered the least relevant are developing cross-sector metrics for technology transfer, financial support for employment retention and the harmonisation of Big Science RI tender codes.

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Following the webinar, a survey was sent to evaluate the results, to which 11 participants responded, as follows:

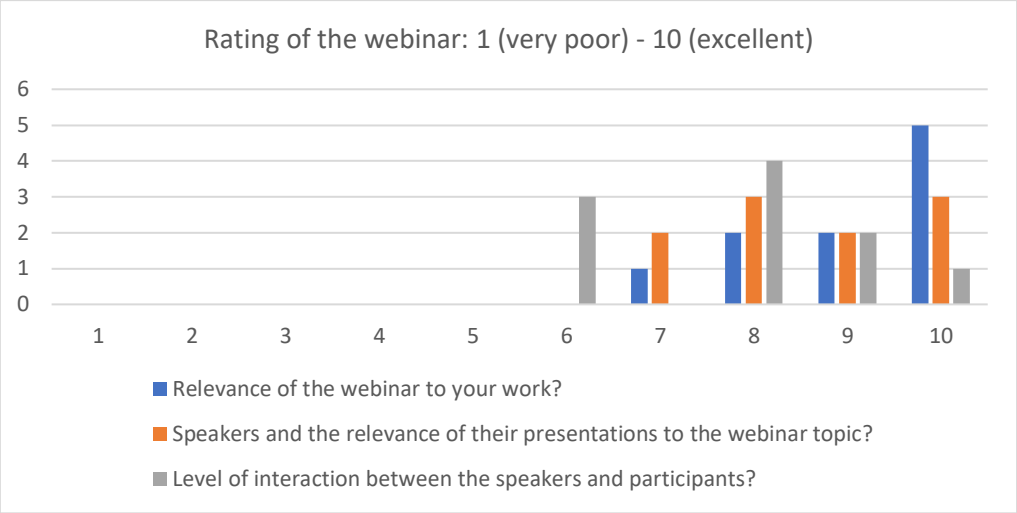

Figure 17 - Webinar #3 rating

The average grades were the following:

- Relevance of the webinar to your work: 9,1
- Speakers and the relevance of their presentations to the webinar topic: 8,6
- Level of interaction between the speakers and participants: 7,8.

The perceived degree of interaction continued to increase compared to previous webinars, and the relevance and speakers were rated highly as well.

Regarding the duration of the webinar, 91% of the participants responded that the duration was appropriate.

Participants were also asked to comment on what they would improve for further sessions:

- *Some virtual visit of an installation or lab?*
- *Invite some industrial working with ILOs or ICOs. Do not always inside people from the ILO / ICO network.*
- *Nothing, just take sure to always have interesting and relevant topics*
- *The time for the seminar was very good*
- *Increase the interaction throught tools similar to Mentimeter, slido...*
- *More orientation opinion meetings such this*
- *Involve other associations and experiences*
- *Mentimeter prioritization exercise was great!*

In general the comments were positive; interaction is still in high demand as well as opening the webinars to external participation such as industry or associations. Regarding possible topics for future sessions, suggestions were as follows:

- *Big Science side Market // Big Science Market size*
- *Digitalisation of procurement and logistics*
- *Mechanism for finding subcontractors and cooperation in large projects as to strengthen European efforts*
- *Impact of COVID in other ESFRI sectors*
- *A webinar for discussion on ILO proposals emerged in the webinar*
- *Presentation and discussion of ILO proposals.*

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4.4. Webinar #4: Tips & Tricks to organise interactive digital events with industry and research infrastructures

The number of registrees to Webinar #4 was 28 and the number of actual connected participants was 26, making the no-show percentage 7%.

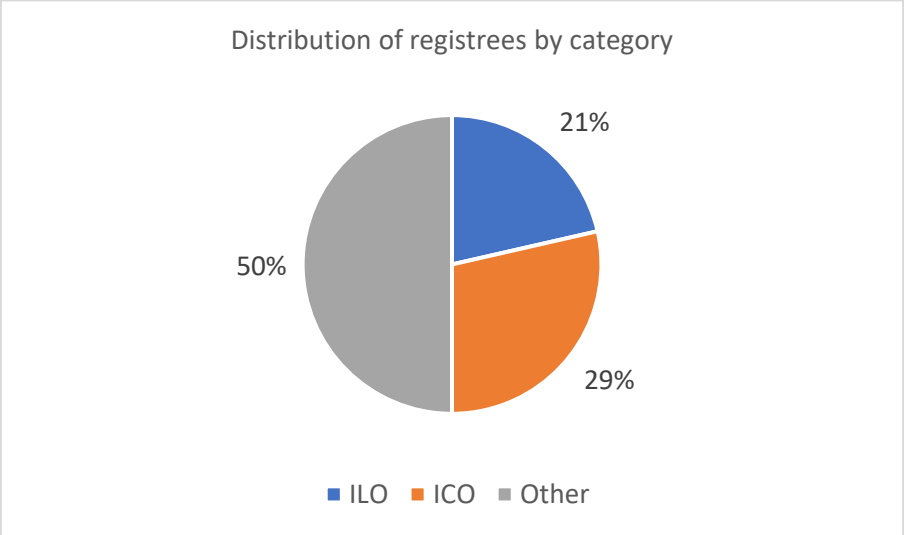

Figure 18 - Webinar #4 distibution of registrees by category

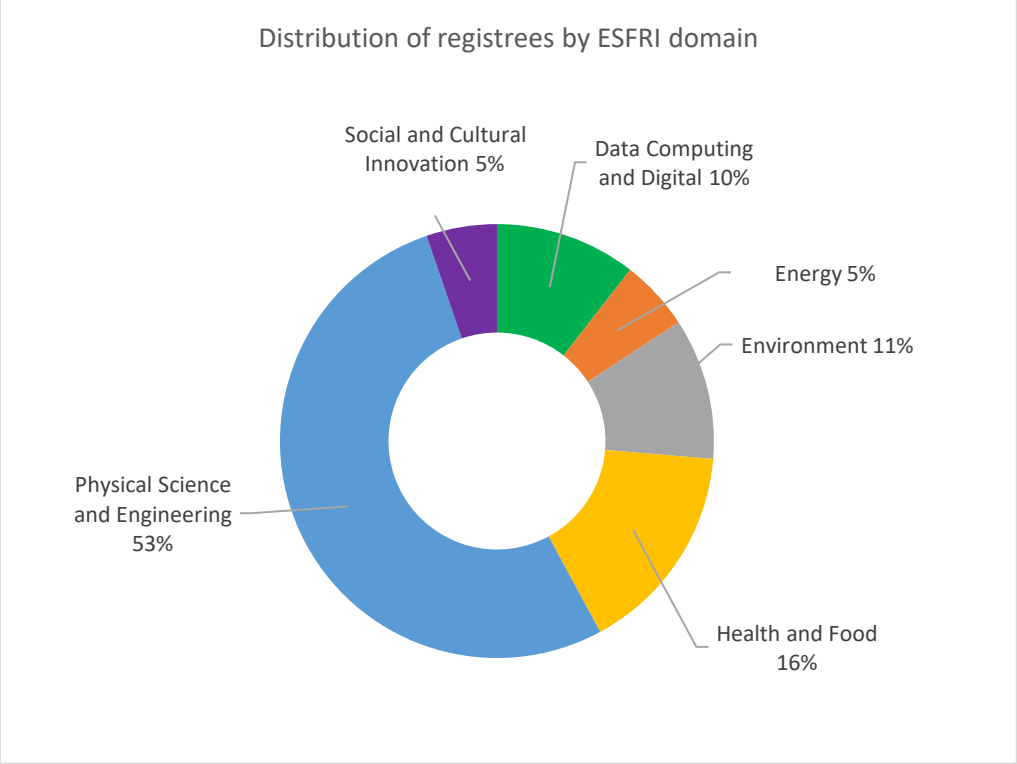

Figure 19 - Webinar #4 distibution of registrees by ESFRI domain

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An online poll was conducted during the webinar, with the following results:

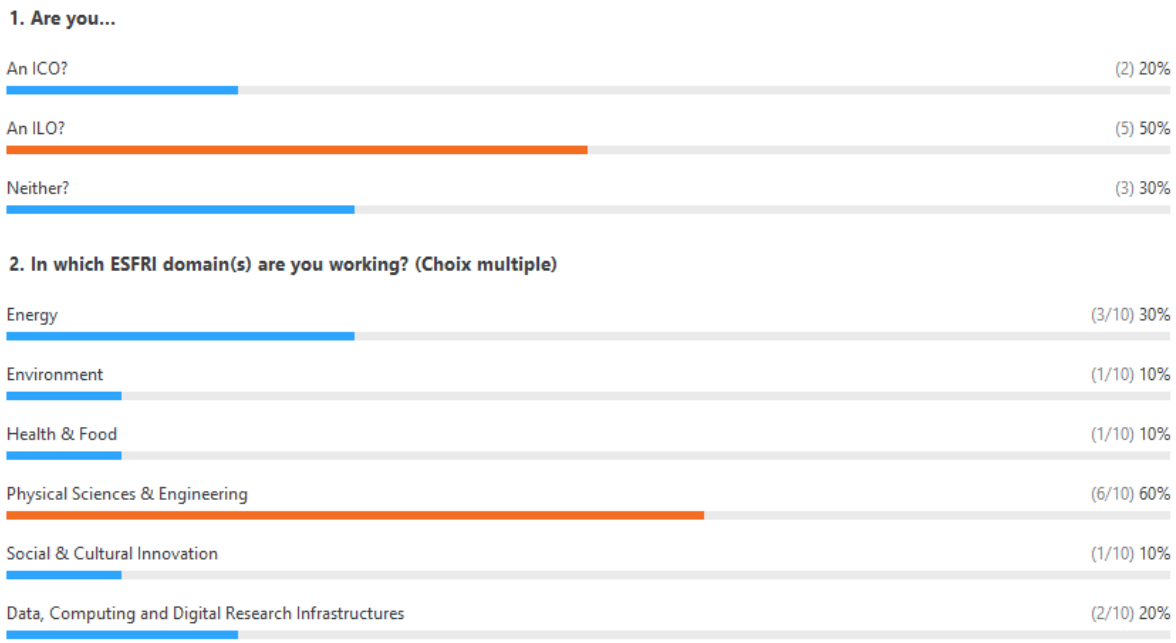

Figure 20 - Webinar #4 online poll

Again, it is noteworthy how the distribution of participants' category (ILO/ICO/Other) differs from the results according to registration. This is not a new finding, despite the ILO and ICO role being defined in the project, the actual professionals often mix the terms (in particular ICOs who work with industry identify themselves as ICOs).

Webinar #4 included several breakout rooms to discuss different topics. In these breakout rooms participants identified the following interactive events that their own organisation has organised or is in the process of doing so including remote participation:

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Short title of event	Number of participants	Duration	New event or previously face2face?	Additional comments
BSBF webinars	150 in each	3 hours	New event	Virtual, low degress of interactivity
H2020 ATMO-ACCESS Kick off meeting	180	3.5 days	New event	Virtual, Sli.do used. Evening gathering (hybrid)
Industry Satellite Meeting	40	3 hrs	Annual event	Yearly DESY user meeting
B2Match meetings				Pitch presentations from companies
Science IT up	50	1,5 hours	New event, previously we organised meetings in a traditional manner	Session questions/answer
Technical webinar on "Speed in Imaging"	80	2 hours	New event	Flash presentations and audience vote on best presentations
HZB User Meeting	More 800	1 day	Previously it was in person	Communication via special chat, sending feedback via another chat

Table 14 - Webinar #4 identified digital events

This webinar included three breakout rooms. The following table summarise the discussions:

Breakout room A: How to foster interaction among participants

Participants in this breakout room were asked to identify ideas with respect to fostering interaction among participants

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Specific challenge with respect to fostering interaction	Ideas how to a foster interaction
Black hole situation – in digital meetings, participants do not see each other	Ask participants to turn on video
What is hybrid? Low number of speakers	
Even in a face to face event, it is not an easy task to get interaction going, in a large room for example.	Break up people in smaller groups (5 people for example), this also works face to face. Try to come up with provocative statements to push people to react, create some kind of "controversy".
Physical /digital event: it is very important to be prepared beforehand	Analyse who is registered, who we want to make contact with, etc. This is more important in the digital sessions.
Hybrid events: what is the benefit of actually travelling to the event if we have very good digital tools	B2Match: it is more creating two types of events, with some special features for physical participants. It is really up to the organiser to think about what will be best for the participants and who we want there. In conferences it is useful when papers are already published to scroll through them
	Huge potential in raising number of participants. There is also a risk, sometime people actually don´t show up online.
	B2Match: they are seeing that people want to be more physical. Sometimes people want to present one day (keynote speaker, or one important lunch). Hybrid events are more about attending part of the event physically and being able to take part in the rest of the event digitally.
How to avoid, in digital events, people doing their own work.	People being involved with touch points periodically during the sessions.

Table 15 - Webinar #4 conclusions from breakout room A

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Breakout room B: Video conferencing & collaboration tools

Participants in this breakout room were asked to identify tools they have tried and/or tools & features which could be useful:

Name of tool or service or website	What I use it for	What I like about the tool	What I don't like / things to be careful about
Wander https://www.wonder.me/	Fun events, coffee breaks		
Zoom	Videoconferencing	Push-to-talk with spacebar	Advanced facilitation features only for paid accounts

Table 16 - Webinar #4 conclusions from breakout room B

Breakout room C: How to ensure attention keeping

Participants in this breakout room were asked to identify challenges and ideas with respect to attention keeping:

Specific challenge with respect to attention keeping	Ideas how to address challenge	Additional information (links to websites, tools, visuals…)
Participants distracted by resolving technical issues	Secondary channel dedicated to this	Skype, Slack, Rocket.Chat
People not participating in break-out rooms	Ask questions, have a convener or session leader, who should be well prepared. Dedicated person monitoring the chat and responding. Use private chat to connect to the silent ones. Group size important (not too small) experience shows that about 20% is active Selection of participants by asking some questions before.	Use Mentimeter, which supports anonymous contributions
People dropping out or engaging in side activities	Limit duration of the event, mix presentations with interactive elements	
Engaging discussion and exchange of experience	Ask questions about positive experiences and also about mistakes that could be avoided - anonymously	

Table 17 - Webinar #4 conclusions from breakout room C

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Following the webinar, a survey was sent to evaluate the results, to which 9 participants responded, as follows:

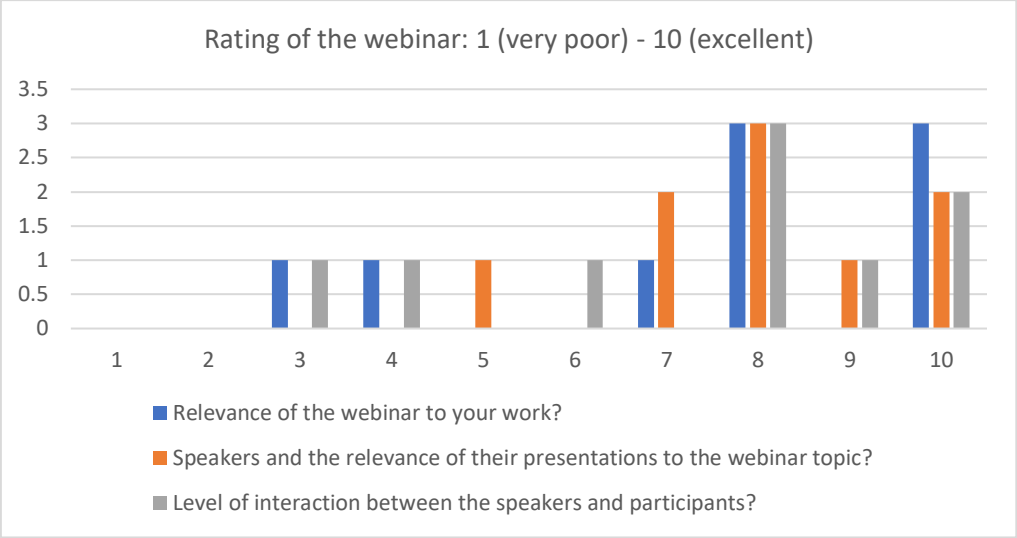

Figure 21 - Webinar #4 rating

The average grades were the following:

- Relevance of the webinar to your work: 7,6
- Speakers and the relevance of their presentations to the webinar topic: 8
- Level of interaction between the speakers and participants: 7,3

Regarding the duration of the webinar, 89% of the participants responded that the duration was appropriate.

Participants were also asked to comment on what they would improve for further sessions:

- *This webinar was a very practical one I enjoyed it*
- *For the breakout sessions there should be a bit more time even if it will increase the webinar duration for additional 10-15 min. Maybe, it could be announced at the beginning, that some participants are welcome to leave and not to participate in the breakout sessions. I would also suggest to distribute a survey asking for "examples of open questions which you would ask as moderators?".*
- *A lot of time is taken up by introductions and warm-up questions on the numbers of ILOs and ICOs present. Presentations are often too long. The exchange of experience, which I consider the most relevant, in practice is much reduced because some sessions overrun and time is only sufficient for very generalized statements. I would like to see less presentations and more time for a moderated (!) discussion.*
- *Mix up the Mentimeter questions with things like, what made one of your events a success or which mistake did you make and want to share with others to avoid*
- *Perhaps a little better time management when it comes to the speakers. They may have talked a little long which infringed on the group work and discussion time.*
- *Well done, excellent preparation*
- *Thank you for your efforts and suggestions!*
- *Keep up the good work!*

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In general the comments were positive; the breakout sessions were considered of interest although management of time has room for improvement, as there was not enough time for a lengthy discussion after the breakout sessions. Regarding possible topics for future sessions, suggestions were as follows:

- *Focus on hybrid event?*
- *You know, I'd like to learn more from b2match.*

4.5. Webinar #5: Strategies for SME interaction and participation in brokerage events

The number of registrees to Webinar #5 was 24 and the number of actual connected participants was 18, making the no-show percentage 25%.

50% of registrees were ILOs, 17% ICOs and 29% either don't know or are neither ILOs nor ICOs. The proportion of ILOs attending was even higher (61%) than that of registrees.

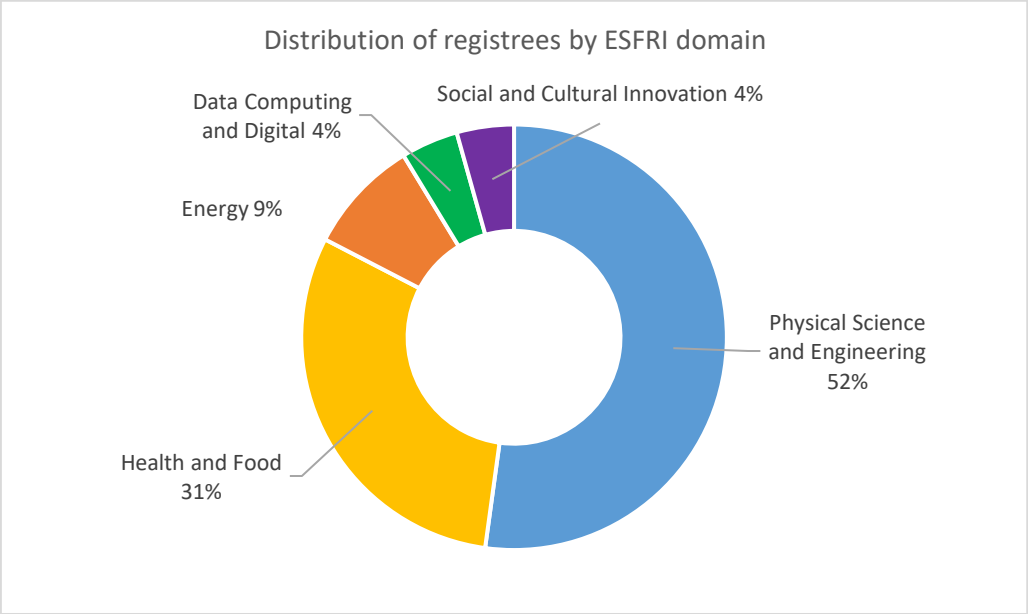

Figure 22 - Webinar #5 distribution of registrees by ESFRI domain

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Following the webinar, a survey was sent to evaluate the results, to which six participants responded, as follows:

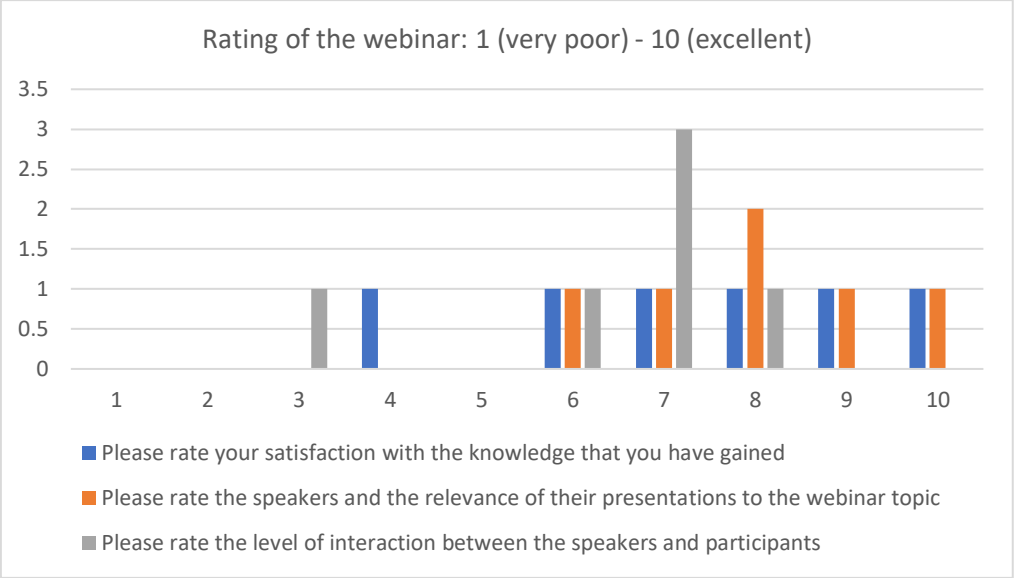

Figure 23 - Webinar #5 rating

The average grades were the following:

- Satisfaction with the knowledge you have gained: 7,3
- Speakers and the relevance of their presentations to the webinar topic: 8
- Level of interaction between the speakers and participants: 6,3

Regarding the duration of the webinar, 66% of the participants responded that the duration was appropriate, 33% that it was too long.

Participants were also asked to comment on what they would improve for further sessions:

- *Maybe, I would give participants the possibility of turning on their cameras*
- *Make sure the speakers keep to their allotted time and make the talks shorter and have them focus on the core of the subject also I think one hour should be enough*
- *I would suggest that participant can have access to the list of participants and turn on their cameras.*

This session used the "webinar" mode of Zoom instead of the usual "meeting" mode, that didn't allow participants to switch on their cameras. This was regretted by 2 of the 6 respondents to the post-webinar survey, and organisers also agree that the webinars are livelier when everyone can turn their cameras on and see who is participating. Thus, the "webinar" mode will not be used in following webinars. Management of speaker time was improvable, as time for questions was too short in the end. Regarding possible topics for future sessions, one suggestion was made:

- *Tools for helping companies*

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4.6. Webinar #6: Exploring new avenues for ILOs – knowledge transfer to industry and use of research infrastructures

The number of registrees to Webinar #6 was 40 and the number of actual connected participants was 38, making the no-show percentage 5%, a very low figure.

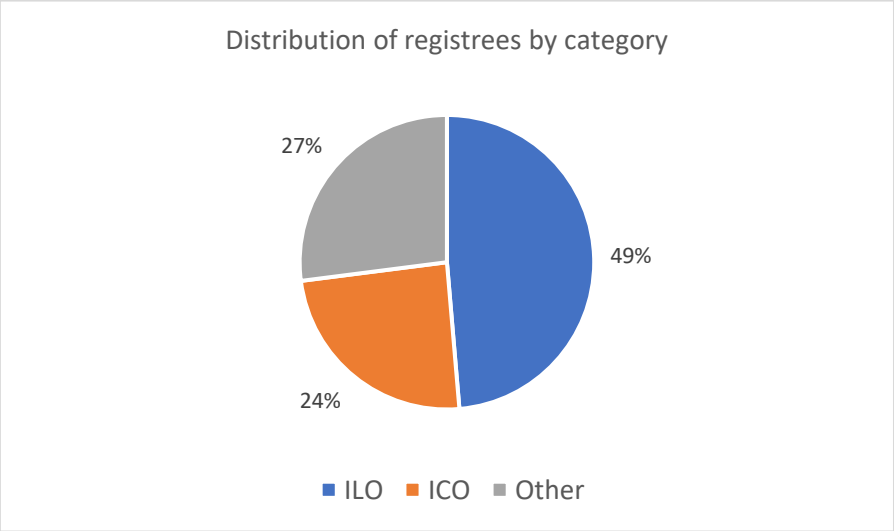

Figure 24 - Webinar #6 distibution of registrees by category

As the objective of the webinar was to discuss a possible evolution of the ILO role, there was a significant number of participating ILOs compared to the other categories.

In the second series of EYK, registrees were asked about their primary and secondary ESFRI domain:

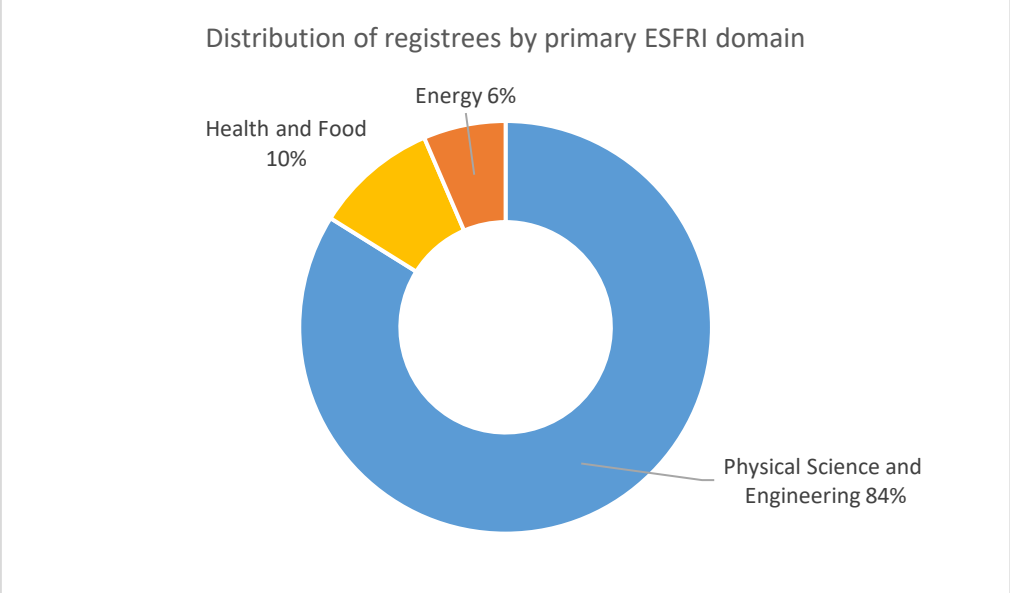

Figure 25 - Webinar #6 distibution of registrees by primary ESFRI domain

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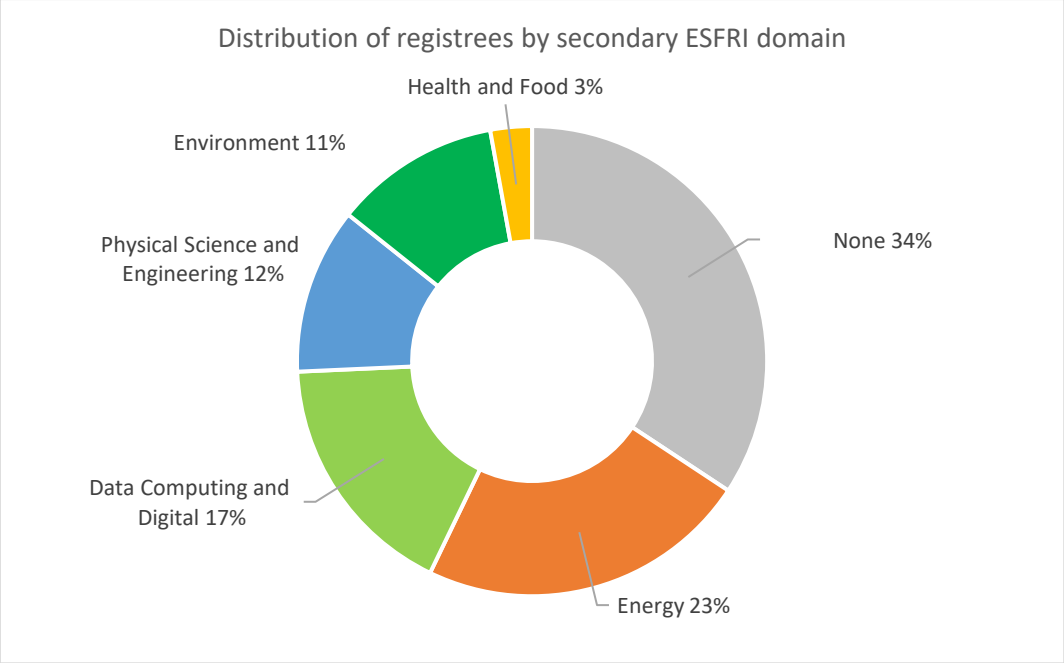

Figure 26 - Webinar #6 distibution of registrees by secondary ESFRI domain

The predominant primary ESFRI domain was Physical Sciences and Engineering which corresponds to the ILO activity, with registrees not identifying a secondary ESFRI domain in 34% of cases, as explained by the fact that ILOs cater only for Big Science organisations which fall in this ESFRI domain. The next relevant secondary ESFRI domain is Energy (this probably accounts for ILO involvement in ITER), followed by Data Computing and Digital.

No online poll was conducted in webinar #6.

Regarding the discussion, the main points that were addressed and expressed by the ILO community were the following:

- Technology transfer requires extensive resources in order to achieve impact, but ILOs are usually too time-constrained and lack the mandate from their ministries. ILOs can contribute if there is a clear case identified between a company and an RI but if more extensive work is needed the effort often fails. Some ILOs are also Knowledge Transfer officers (CERN), this can ease the synergy between both roles.
- ILOs involved in supporting industry as a user have had success stories (eg. DK-DTI with ESRF) but the activity usually has an origin in the research institute and is not directly linked with the ILO role. Supporting innovation is linked to the ILO role but securing funding for this is a challenge. Other experiences include national industry involvement for HPC, this requires training and further expertise.
- Technology Transfer Track in BSBF, where a framework for companies and Big Science RIs is offered to exploit Big Science technologies. This activity lies out of the nominal ILO role and requires extra resources, it needs different communication skills as stakeholders are different.
- Experiences organising national Big Science business meetings (IT), where industries learn that technologies developed for one RI can be applied to others. Collaboration between ILOs belonging to different RIs should first be explored at a national level.
- ICOs remarked that ILOs interested in getting involved in industry as a user should start at a national level and look at ways to contact industries from different market segments that the ones they usually work with.
- Several participants expressed their view of the big difference between the ILO and the ICO role. ILOs speak to business development representatives, whereas ICOs interface with R&D managers. Also, supplying companies aren´t usually the best candidates for technology

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transfer. Therefore it is very complex for ILOs to get involved in both jobs, if they want to do so they need a clear mandate and resources.

- ILOs could assist identifying national company needs as technology transfer from RIs to industry works if RIs listen to what companies need.
- In industry as a supplier, ILOs are valuable identifying the high-added value technology companies and flagging them to the RIs, as this can help foster technology transfer between the two skakeholders.
- Overlap between suppliers and users/knowledge transfer of RIs in general is low, whether because the sectors are different or due to the size of the companies (startups or large international groups which work for different markets in the case of KT).
- The ICO role is different depending on whether the RI performs basic or applied research, although academia-oriented RIs have a mandate from their stakeholders to involve industry as a user. This motivates scientists in the organisations.
- Involving industry as a user requires extensive technical understanding, some ILOs expressed doubts about the ILO being the ideal role to do so, as they generally have a more general overview of the technologies and science, whereas specialised KT forums could be more appropriate.
- Sharing of industry contacts from national ILO databases with ICOs could be a simple but valuable activity.

Following the webinar, a survey was sent to evaluate the results, to which 18 participants responded, as follows:

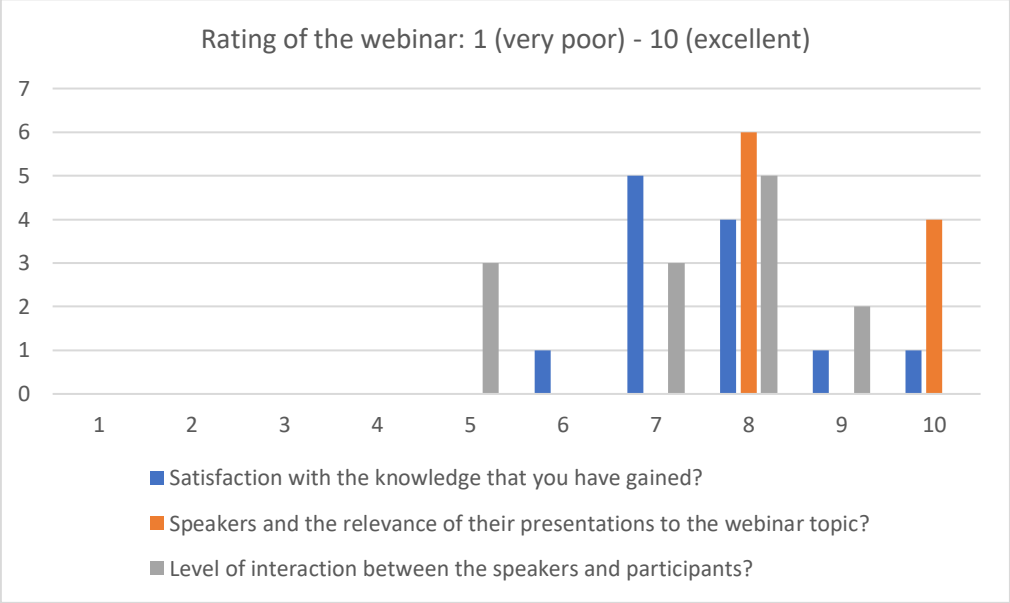

Figure 27 - Webinar #6 rating

The average grades were the following:

- Satisfaction with the knowledge that you have gained: 7,7
- Speakers and the relevance of their presentations to the webinar topic: 8,8
- Level of interaction between the speakers and participants: 7,2

Regarding the duration of the webinar, 83% of the participants responded that the duration was appropriate, 11% that it was too short and 6% that is was too long

Participants were also asked to comment on what they would improve for further sessions:

- *Two breakout rooms: one for ILOs and one for ICOs*
- *Industrial speaker and major involvement of ILOs*

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- *The format and the duration are fine.*
- *Working break-out rooms :-)* (note: breakout rooms were planned for this webinar but due to technical issues the discussion was held in the plenary session)
- *It was great. But I think we would have profited from having a bit more time to discuss and having more time would have allowed to structure the discussion better.*
- *We need to focus for the ILOs on how to meet their needs in terms of time, funding and specific expertise and skills. This to enlarge their scope to industry as user.*
- *It would be nice to get more interaction from the participants: organisers need to think of ways to get them engaged.*
- *I happy with the seminars as they are - always very professional and on the spot.*
- *Keep up with the good work :-)*

Ideas for further seminars:

- *Licensing, IPR, legal aspects of contracts.*
- *No idea at the moment*

4.7. Webinar #7: Resolving issues on the path to public-private collaboration

The number of registrees to Webinar #7 was 39 and the number of actual connected participants was 27, making the no-show percentage 29%, a usual figure.

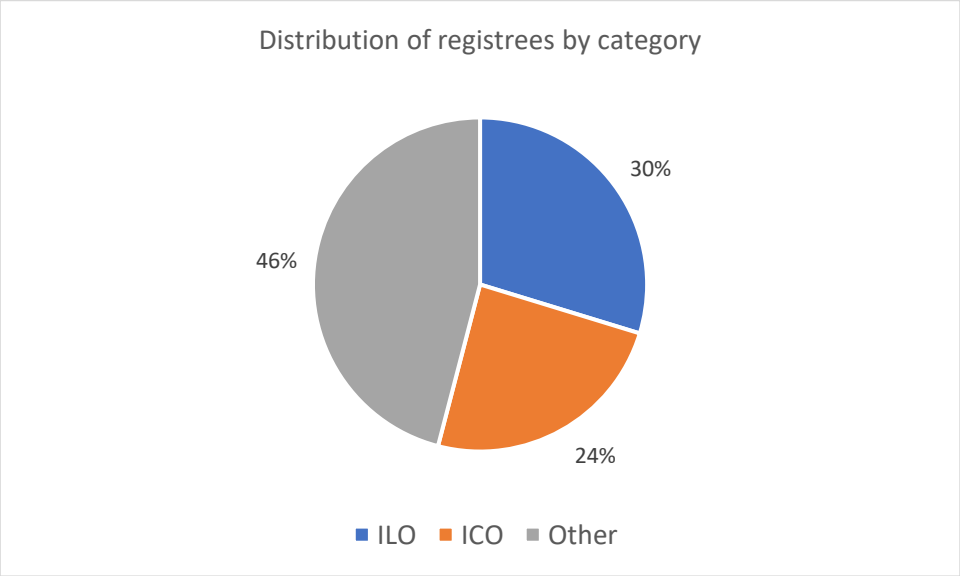

Figure 28 - Webinar #7 distribution of registrees by category

The topic of this webinar attracted a lot of non-ICO or ILO registrees, as almost half of them described their category as “other”. This could be an indication of the topic of IP and legal aspects of public-private collaboration attractivity outside of the ENRIITC ILO and ICO network and a potential way forward to broaden the scope of the ENRIITC network.

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In the second series of EYK, registrees were asked about their primary and secondary ESFRI domain:

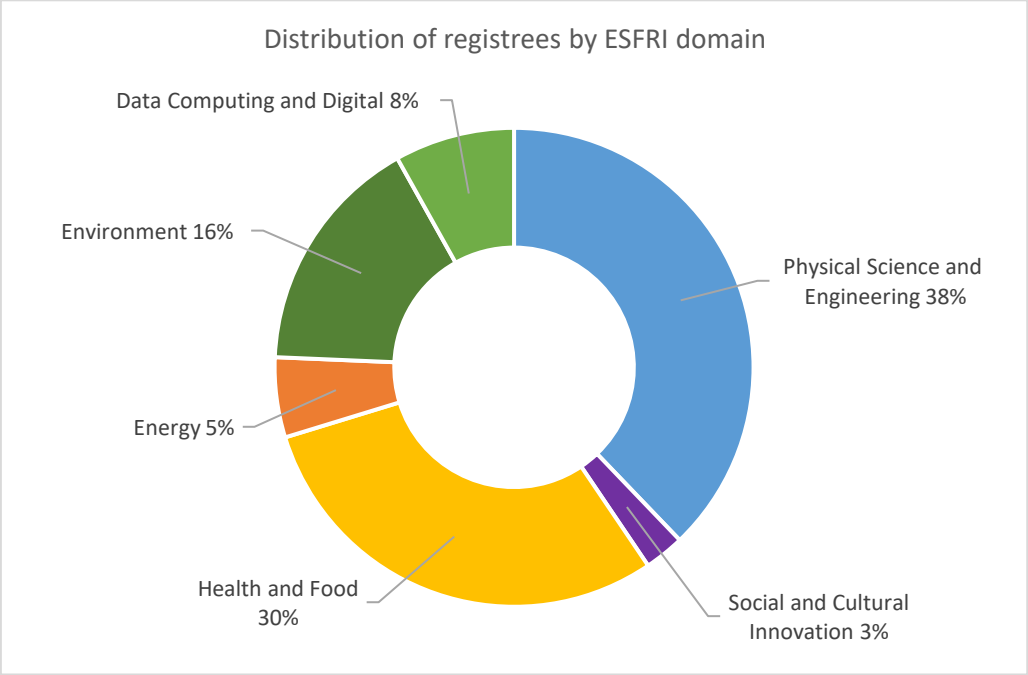

Figure 29 - Webinar #7 distribution of registrees by primary ESFRI domain

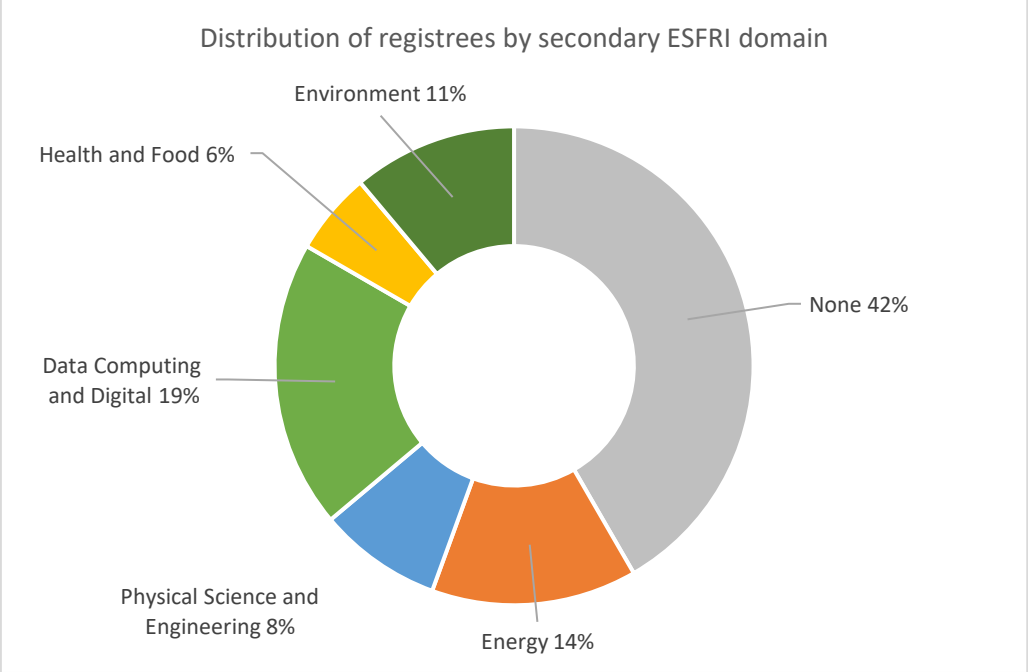

Figure 30 - Webinar #7 distribution of registrees by secondary ESFRI domain

An online poll was conducted in Webinar #7 with 8 respondents:

- To the question regarding ILO/ICO positions of participants, 3 answered they are an ILO, 1 an ICO and 4 neither, reflecting registrations quite well.
- To the question regarding their ESFRI domains, 4 answered “Physical Sciences & Engineering” only, 2 “Health and Food” only, 1 both previously cited domains, and 1 ticked them all, reflecting *ENRIITC your Knowledge* usual participants fairly well.

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Regarding the discussion, the main points that were addressed and expressed by the ILO community were the following:

- There are principles to apply when establishing ownership, process and governance, cost issues and use rights around patents. The speakers touched upon this. It is good to consult people in your organisation with experience of such agreements.
- Among limiting factors are finding appropriate partners (especially if the technology or services required are new), difficulty to maintain momentum of the process to a deal, and bureaucracy. The latter cannot always be avoided, e.g. when negotiating large projects with public funding where strict rules have to be followed.
- ASTP is keen to hear in which phases people encounter problems and what they perceive as major limiting factors. Sharing these perceptions can help in identifying key areas for action.
- There are a number of sources of (on line) help and some were mentioned in the presentations.
- It was emphasised that there are a number of objectives which motivate effective technology transfer, not only generating royalties. The impact for society is often a key motivation for both public and private entities.
- Big Science organisations at the cutting edge of new technology have specific needs from their contractors and collaborators. Long term commitment and intensive 2-way communication are key to success. The markets which arise can be highly specialised and therefore relatively small. Companies need to be aware and accept this. On the positive side, effective collaboration with the big science entity can lead to very long term trust and partnership.
- In tendering for contracts with big institutes there is a learning curve for new players. Often the first attempt does not succeed but future tenders may benefit from the learning process.

Following the webinar, a survey was sent by email and through Zoom interface to evaluate the outcomes, to which 11 participants responded, as follows:

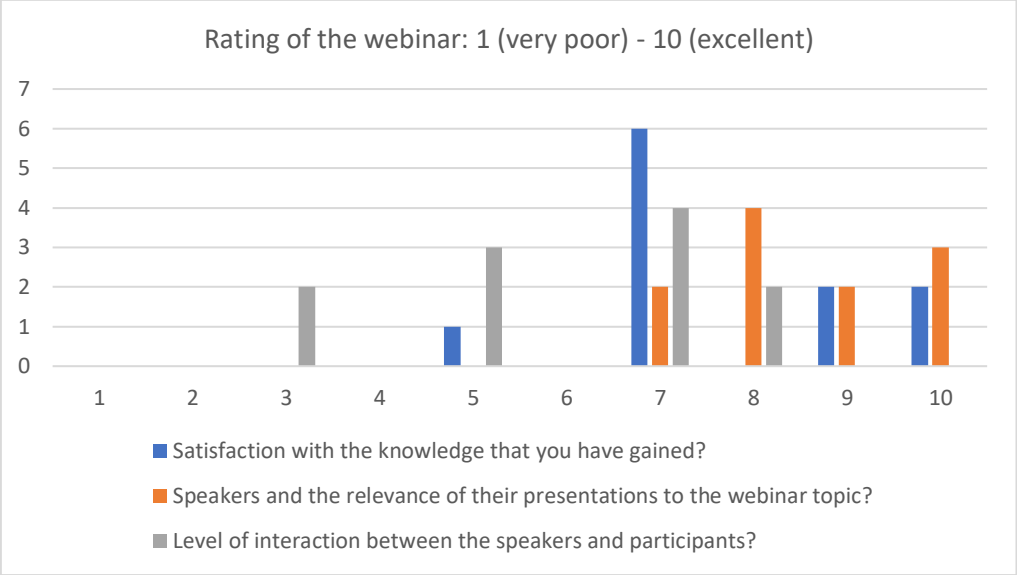

Figure 31 - Webinar #7 rating

The average grades were the following:

- Satisfaction with the knowledge that you have gained: 7.73
- Speakers and the relevance of their presentations to the webinar topic: 8.55
- Level of interaction between the speakers and participants: 5.91

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Regarding the duration of the webinar, 91% (10) of the participants responded that the duration was appropriate, 9% (1) that it was too short.

Participants were also asked to comment on what they would improve for further sessions:

- *More interaction and time for discussion / questions*
- *The set-up was fine, but please ensure that all the speakers have a constructive message.*
- *Insert more interactive activities for example to understand if the audience understood the main concepts discussed or have had same/different experiences compared with the examples proposed.*
- *Relevant links to be provided in the chatbox*

Ideas for further seminars:

- *Ways of engaging with new industry partners and expanding your network to new fields.*

4.8. Webinar #8: Broadening the scope towards an enhanced ENRIITC ILO & ICO network

The number of registrees to Webinar #8 was 30 and the number of actual connected participants was 26, making the no-show percentage 13%.

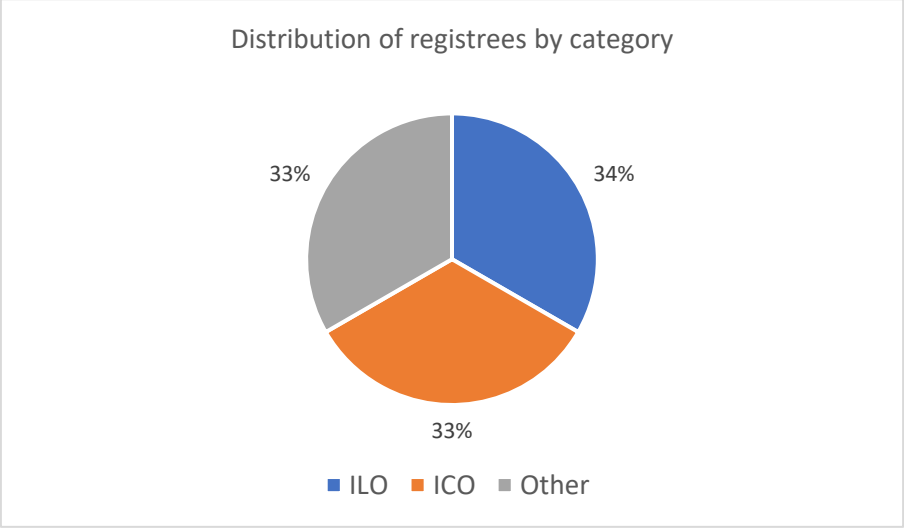

Figure 32 - Webinar #8 distibution of registries' by category

There was a balance between ILOs, ICOs and other positions. Among the Others, there were research managers, communications managers, grant officers, mostly belonging to public and private not for profit associations.

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In the second series of *ENRIITC your Knowledge*, registrees were asked about their primary and secondary ESFRI domain:

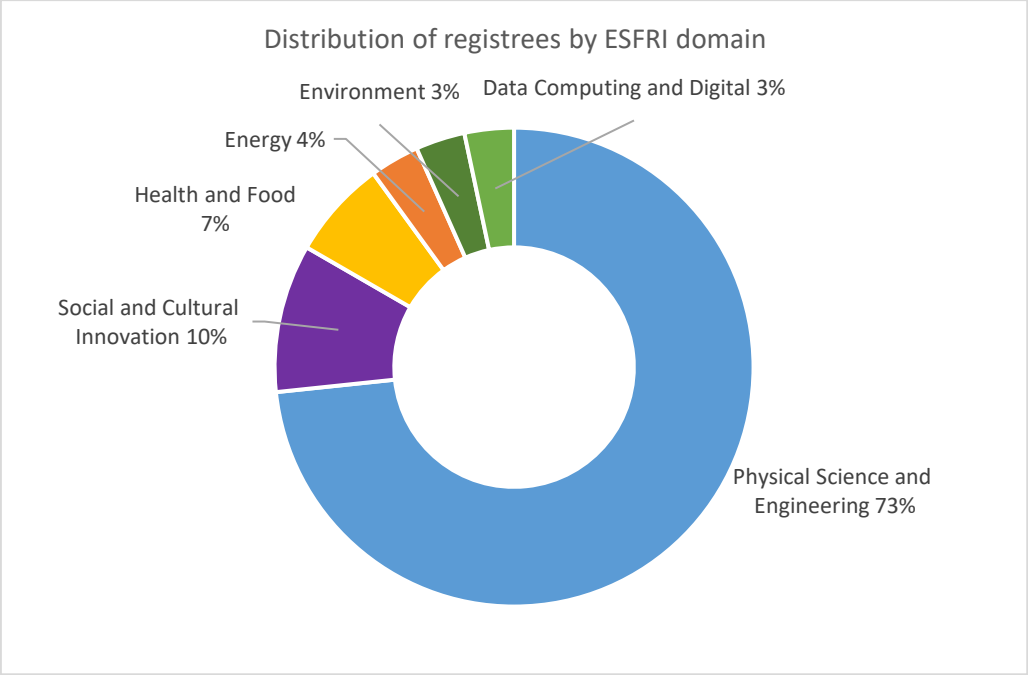

Figure 33 - Webinar #8 distribution of registrees by primary ESFRI domain

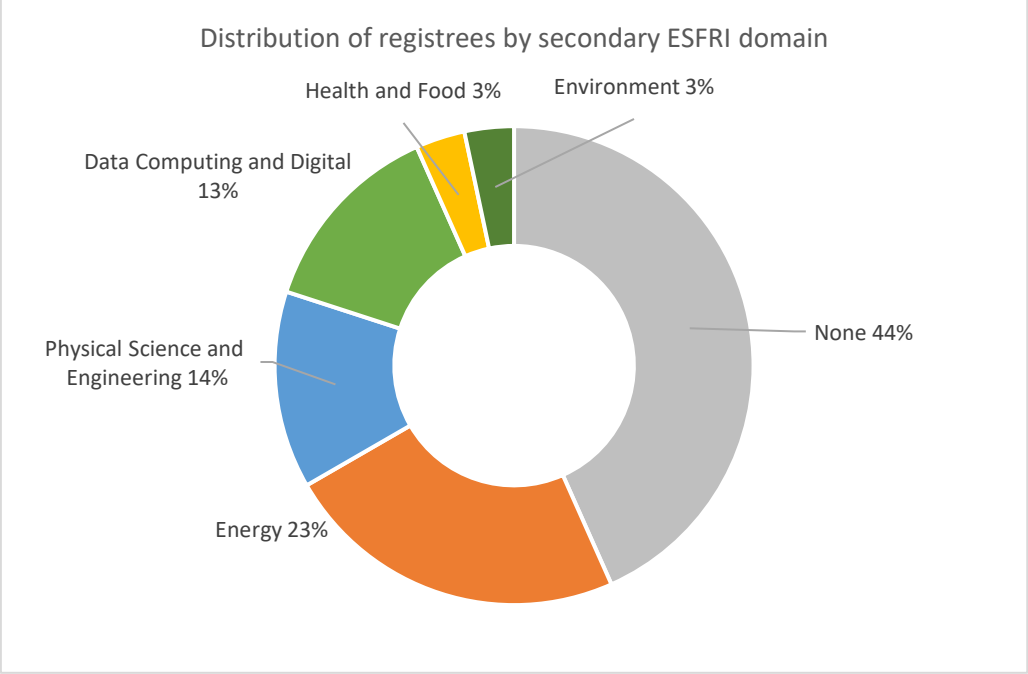

Figure 34 - Webinar #8 distibution of registrees by secondary ESFRI domain

Once again the predominant primary ESFRI domain is Physical Sciences and Engineering which corresponds to the ILO activity, with registrees not identifying a secondary ESFRI domain in 44% of cases, as explained by the fact that ILOs cater only for Big Science organisations which fall in this ESFRI domain. There was representation from all the ESFRI domains in the webinar.

No online poll was conducted in Webinar #8.

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As explained in previous sections, in this final webinar of the series, ILOs and ICOs from the ENRIITC community were asked to deliver flash presentations regarding an innovative experience of industry collaborating with RIs. The speakers covered the following topics:

- Anna Hall, from Big Science Sweden (ILO, Sweden), explained the main findings and conclusions coming out of the Pan-European partnering and industry involvement in Big Science brokerage event that was organised as an ENRIITC pilot event. A recurring topic in the event was the need to form European consortia (in particular for SMEs) for large Big Science procurements and how ILOs can form structures for industry collaboration over time. Results from Focus Group #5 were also highlighted.
- Pauline Audergon (ICO), from INSTRUCT ERIC, explained the lessons learnt from the INSTRUCT associate brokerage event. Overall it was a successful event which managed to reach scientists outside the INSTRCT community. There was a previous LinkedIn campaign whose effects were difficult to assess.
- Erik Fernández (ILO, Spain) from INDUCIENCIA, explained the main findings from the INDUCIENCIA associate brokerage event. With 148 registrations and 100 show-ups, it was a very successful post-pandemic brokerage event which proved that physical events are in high demand by industry.
- Iulianna van del Lek, from CLARIN, also provided feedback from the SSH virtual associate event organised with CLARIN. Some key identified points were the need to increases awareness, the importance of the figure of the Innovation Officer as translator between RIs and industry and the need for sustainability plans on the part of the RIs.
- Michel Hübner (ILO, Switzerland) also provided a summary of the ESO instruments brokerage event, a physical associate event funded by ENRIITC. It was highly successful, with 141 registrees and 41 taking part remotely.
- Nigel Wagstaff (Innovation Manager) from EATRIS presented the EATRIS networking and outreach activities dealing with Artificial Intelligence and Machine Learning in healthcare.
- Angela Zennaro (ICO), from CERIC discussed their strategies and experience in R2B events. She highlighted the need for training for the R&D and ILO/ICO staff and interviews with the industry staff on how to improve their access/experience with RIs.
- Sylwia Wójtowicz (ILO, Poland) summarised the main findings of the strategy for training of ILOs/ICOs and outreach towards Industry.
- Marco Galeotti (ICO) from EMSO talked about the EMSO Time Series Conference 2021 and how the involvement of industry in training is an effective first step to pursue future collaborations.
- Ana Belén del Cero (ILO) from CDTI talked about the PRISMAC (High Field superconducting Magnet Programme) an ILO initiative set up and funded by CDTI with CIEMAT and CERN to involve industry in the early stages of high field magnets' R&D and assembly, with a view to future CERN procurements.
- Wahid Rofagha (ICO) from PRACE talked about how PRACE engages with industry, adapting its HPC-access programmes to the needs of SMEs and establishing different priorities when working with science and with industry.
- Nikolaj Zangenberg (ILO, Denmark) from DTI talked about how PERIIA was set up, a collaboration network formed by competitor ILOs.
- Ed Mitchell (ILO) from ESRF discussed the ways that working with industry as a user has evolved after COVID, establishing the need for increased access flexibility and more effective outreach.

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Following the webinar, a survey was sent to evaluate the results, to which 12 participants responded, as follows:

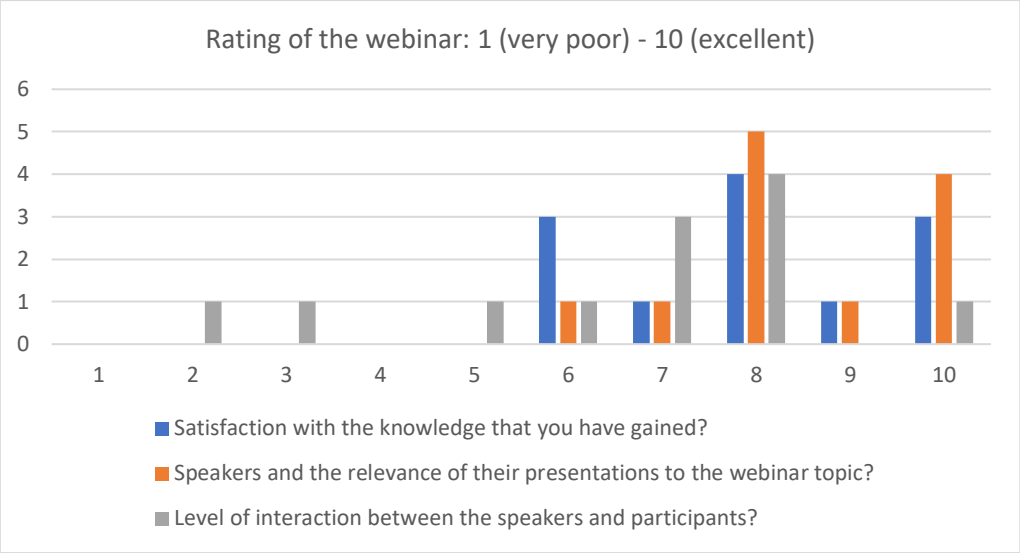

Figure 35 - Webinar #8 rating

The average grades were the following:

- Satisfaction with the knowledge that you have gained: 8
- Speakers and the relevance of their presentations to the webinar topic: 8,50
- Level of interaction between the speakers and participants: 6,58

Regarding the duration of the webinar, 67% of the participants responded that the duration was appropriate, 17% that it was too short and 17% that it was too long

Participants were also asked to comment on ideas for future training sessions and comments on the session, yielding the following results:

- *There were too many speakers*
- *Preparation of ENRIITC Granada event. Converging to common resolutions / statements*
- *Activities planned at the ENRIITC BSBF sessions: Soft skills development for establishing collaboration and brokerage.*
- *Custom training for specific domains*
- *Looking forward to the ENRIITC event in Granada !*

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5. Recommendations towards the training strategy for ILOs and ICOs

The main conclusions that stem from participants' feedback, comments and rating from the webinar series are the following:

- Rating of the webinars' content and speakers was consistently high, although participants preferred webinars with a limited number of speakers over more densely populated ones.
- Duration was considered appropriate although strict management of timing was pointed out as critical in order to ensure audience participation and lengthy discussions.
- Interaction mechanisms were rated lower but improved during the series and this was valued by the participants. Still, ILOs and ICOs taking part value interaction and being able to participate higher than classical formats only featuring presentations from the speakers. These interactive mechanisms should be further explored in the future. ILOs and ICOs need to have knowledge of the necessary tools.
- Attendance to the webinars was positive but response waned somewhat throughout the series. The series would have benefited from face to face meetings, in particular to share experiences and interact.
- In general ILOs and ICOs view these webinars as a means to share their ways of working and exchange of experience, discuss about common needs and approaches, etc. Feedback from participants in the post-webinar evaluation forms expressed this need as more important than training in formal topics.
- Breakout rooms and other means to stimulate discussion are viewed as positive despite participants being somewhat reluctant to discuss and engage in discussion when these were set up. Participants' engagement prior to the webinar is positive, as learned in webinar #3, where a survey was conducted prior to the webinar.
- Bringing in external actors besides the ILO/ICO community is valued positively and provided added value. Training should involve representatives from industry, industrial associations or clusters.
- It is necessary to promote training and outreach events for less represented ESFRI domains (the most represented ones were Physical Sciences and Engineering and Health and Food).
- Training is a powerful tool to connect and make industry aware of the possibilities of collaboration RIs can offer.

Regarding the training topics and their application to the ILO/ICO role:

- The webinars with more generalistic topics (#1, #2, #4, #5, #7 and #8) leveraged on common needs and interests for ILOs and ICOs (organisation of events, legal and practical issues, the role of ILOs vs ICOs, etc.). Participants' ratings were consistently positive, proving these joint training sessions have a real added value.
- On the other hand, focus on concrete vs. generalistic topics seems to work: webinar #3 which only targeted the Big Science market had a better attendance rate than some of the others with more open topics. The same happened for webinar #6 which focused on ILO involvement in fostering industry as a user of Big Science organisations.
- Webinars dealing with the organisation of events (#2 and #4) and how SMEs should plan these events (#5) were well received. This is a good field where the experiences of ILOs and ICOs can be mutually beneficial and there are synergies that can be exploited.
- The final webinar, in which members of the ENRIITC community delivered flash presentations, also received good ratings, although the format should be improved to enable discussion around the presented concepts.
- A summary of further topics of interest identified by the webinar participants is the following:

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- Identifying common ground for ILOs and ICOs, in particular their role to enhance innovation, for example through public procurement.
- How to engage with new industry partners and expand your network to new fields
- How to connect researchers with industry
- Technology and knowledge transfer, or how to build new markets around disruptive technologies emerging from RI projects
- How to successfully organise hybrid events
- Digital tools to connect and provide services to industry for ILOs/ICOs
- Custom training for specific domains
- Governance and relations among Big Science organisations
- A post-pandemic view across other ESFRI domains
- Mechanism for finding subcontractors and cooperation in large projects as to strengthen European efforts

There will be a final ENRIITC event in the Big Science Business Forum 2022 in Granada on October 4, with a specific training session covering soft skills development for establishing collaboration and brokerage. See Appendix V for the draft programme of the training session.

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Appendix I List of registrees (anonymised)

Webinar #1: The ILO and ICO roles for beginners

Affiliation	Country	Position	ESFRI domain	Type of RI	Category
Instruct-ERIC	United Kingdom	trainee project manager	Health and Food	Distributed	ICO
Institut Laue-Langevin	France	Industry Contact Officer	Physical Science and Engineering	Centralised	ICO
University of Kent	United Kingdom	Europlanet 2024 RI Project Manager	Physical Science and Engineering	Distributed	ICO
CLARIN ERIC	Netherlands	director	Social and Cultural Innovation	Distributed	ICO
CNRS LaMP	France	EU project manager	Environment	Distributed	ICO
EMFL	France	Industrial Liaison Officer	Physical Science and Engineering	Centralised	ICO
EMPHASIS / Forschungszentrum Jülich	Germany	Strategy	Health and Food	Distributed	ICO
EMSO ERIC	Italy	Communication Officer	Environment	Distributed	ICO
elisa@clarin.eu	Italy	External Relations Officer	Social and Cultural Innovation	Distributed	ICO
EMBRC-ERIC	France	Project Manager	Environment; Health and Food	Distributed	ICO
AnaEE	France	Program Manager	Health and Food	Distributed	ICO
ESRF	France	Head of BizDev	Physical Science and Engineering	Centralised	ICO
Euro-BioImaging Industry Board	Germany	Industry Board Coordinator	Health and Food	Distributed	ICO
PRACE - Partnership for Advanced Computing in Europe	Belgium	Industry Contact Officer	Data Computing and Digital; Energy; Environment; Health and Food; Physical Science and Engineering	Distributed	ICO
EATRIS	Netherlands	Business Development Manager	Health and Food	Distributed	ICO
CLARIN ERIC	Netherlands	Training and Education Officer	Data Computing and Digital; Social and Cultural Innovation	Distributed	ICO
EATRIS	Netherlands	Advisor Innovation Support	Health and Food	Distributed	ICO
CERIC-ERIC	Italy	Head of industrial liaison ad technology transfer	Energy; Physical Science and Engineering	Distributed	ICO
Facility for Antiproton and Ion Research (FAIR)	Germany	In-kind procurement; coordination of ILO network @ FAIR			Other

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ENEA	Italy	ILO - Industrial Liaison Officer	Energy	Centralised	ILO
NWO/ILO-net	Netherlands	Coordinator Dutch ILO-net	Physical Science and Engineering	Centralised	ILO
CDTI (Centre for the Development of Industrial Technology)	Spain	Spanish ILO for ITER	Physical Science and Engineering	Centralised	ILO
CDTI, E.P.E.	Spain	ILO for ESO and SKA	Physical Science and Engineering	Centralised	ILO
CDTI	Spain	ILO & Proyect Manager	Physical Science and Engineering	Centralised	ILO
CDTI	Spain	Spanish ILO - CERN, ESRF, ESS, ILL and XFEL	Physical Science and Engineering	Centralised	ILO
STFC	United Kingdom	Assistant UK ILO to CERN	Physical Science and Engineering	Centralised	ILO
ILO network the Netherlands	Netherlands	ILO	Physical Science and Engineering	Centralised	ILO
Nikhef	Netherlands	ILO	Physical Science and Engineering	Centralised	ILO
National Center for Nuclear Research/Wrocław Technology Park	Poland	ILO	Physical Science and Engineering	Centralised	ILO
NTNU	Norway	Stipendiat			Other
iClusion	Netherlands	Business Development Manager	Health and Food		Other
EATRIS	France	Education & Training Manager			Other
EATRIS	Netherlands	Head of Communications			Other
EMSO ERIC	Italy	strategy consultant	Environment	Distributed	Other
BigScience.dk	Denmark	Network coordinator			Other
N.A.	United Kingdom	Finance assistant			Other
SIOS	Norway	Information officer	Environment	Distributed	Other
Enterprise Estonia	Estonia	Project Manager			Other
INDUCIENCIA / INEUSTAR	Spain	Project Manager			Other
DARIAH-eu	Netherlands	Information Specialist			Other
CNR Consiglio Nazionale delle Ricerche - IOM Institute	Italy	Tecnologist			Other
Danish Agency for Higher Education and Science	Denmark	Special Advisor			Other
Stazione Zoologica Anton Dohrn	Italy	Postdoc			Other
Elter PPP	Serbia	Project Manager			Other

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University of Nottingham	United Kingdom	Professor of Computer Science		Distributed	Other
King's College London	United Kingdom	Senior Epidemiologist			Other
Technical University of Denmark	Denmark	Associate Professor	Physical Science and Engineering		Other

Webinar #2: The basics of physical brokerage events for first-time organisers

Affiliation	Country	Position	ESFRI Domain	Type of RI	Category
NeurATRIS	France	Bus Dev Manager	Health and Food	Distributed	ICO
ISIS Neutron and Muon Source	United Kingdom	Business Development Manager	Physical Science and Engineering	Centralised	ICO
GSI	Germany	Innovationmanager / Technology Liasion Officer	Data Computing and Digital; Physical Science and Engineering	Centralised	ICO
EDIReX/EurOPDX research infrastructure	Italy	research infrastructure Manager	Health and Food	Distributed	ICO
Institut Laue-Langevin	France	Industry Contact Officer	Physical Science and Engineering	Centralised	ICO
DESY ITT	Germany	Industry Relations Management	Energy; Health and Food; Physical Science and Engineering	Centralised	ICO
EMBRC-ERIC	France	Project Manager	Environment; Health and Food	Distributed	ICO
PhenomUK Network Manager	United Kingdom	Industrial liaison Manager	Data Computing and Digital; Environment; Physical Science and Engineering	Centralised	ICO
AnaEE	France	Program Manager	Environment; Health and Food	Distributed	ICO
ESRF	France	Head of BizDev	Physical Science and Engineering	Centralised	ICO
BSC-CNS	Spain	Technology Transfer Officer	Data Computing and Digital	Centralised	ICO
Euro-BioImaging Industry Board	Germany	Industry Board Coordinator	Health and Food	Distributed	ICO
Helmholtz-entrum Hereon	Germany	Industrial Relations Manager	Physical Science and Engineering	Centralised	ICO
Facility for Antiproton and Ion Research (FAIR)	Germany	In-kind procurement; coordination of ILO network @ FAIR	Physical Science and Engineering	Centralised	ICO
CLARIN	Netherlands	Training and Education	Social and Cultural Innovation	Distributed	ICO
EATRIS	Netherlands	Advisor Innovation Support	Health and Food	Distributed	ICO
ILL	France	German ILO for ESRF and ILL	Physical Science and Engineering	Centralised	ICO

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ANI	Portugal	Industrial Liaison Officer	Physical Science and Engineering	Centralised	ILO
CDTI	Spain	Spanish Industrial Liaison Officer for the ITER project	Physical Science and Engineering	Centralised	ILO
CDTI, E.P.E.	Spain	ILO for ESO and SKA	Physical Science and Engineering	Centralised	ILO
Teknologisk Institut	Denmark	BigScience.dk network coordinator, ILO for ESO, senior consultant	Physical Science and Engineering	Centralised	ILO
Ministère de l'Enseignement Supérieur, Recherche et Innovation	France	Industrial Partnership for French research infrastructures	Physical Science and Engineering	Centralised	ILO
CDTI	Spain	ILO & Proyect Manager	Physical Science and Engineering	Centralised	ILO
CDTI	Spain	Spanish ILO CERN, ESRF, ESS, XFEL and ILL	Physical Science and Engineering	Centralised	ILO
STFC	United Kingdom	Assistant UK ILO to CERN	Physical Science and Engineering	Centralised	ILO
CDTI	Spain	head of department	Physical Science and Engineering	Centralised	ILO
Nikhef	Netherlands	ILO	Physical Science and Engineering	Centralised	ILO
INPP-NCSR:Demokritos-Athens	Greece	Retirest Scientist -Former ILO and TTO-Advisor for the Industry-Representative @HEPTech			Other
COMSOL France	France	Technical Sales Engineer			Other
EATRIS	France	Education & Training Manager			Other
ESRF	France	Communication Manager			Other
EMSO ERIC	Italy	strategy consultatnt	Environment		Other
ELI-ALPS	Hungary	project manager			Other
European Spallation Source ERIC	Sweden	Senior Logistics Officer, Group Leader Warehouse & Logistics			Other
none	Greece	Technology transfer office			Other
INDUCIENCIA / INEUSTAR	Spain	Project Manager			Other
DARIAH-ERIC	Netherlands	Integration Officer			Other
Elter PPP	Serbia	Project Manager			Other
Innovation	Germany	Innovation Manager	Data Computing and Digital	Centralised	Other

Webinar #3: Industrial impact in the Big Science market after one year of COVID pandemic

Affiliation	Country	Position	ESFRI domain	Type of RI	Category

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Fusion for Energy	Spain	Deputy CFO	Energy; Physical Science and Engineering	Centralised	ICO
DESY ITT	Germany	Industry Relations Manager	Energy; Environment; Health and Food; Physical Science and Engineering	Centralised	ICO
ILL	France	German ILO for ESRF and ILL	Physical Science and Engineering		ICO
DESY PT	Germany	Industrial Liaison Officer	Physical Science and Engineering		ICO
Facility for Antiproton and Ion Research (FAIR)	Germany	In-kind procurement; coordination of ILO network @ FAIR	Physical Science and Engineering	Centralised	ICO
ENEA	Italy	ILO - Industrial Liaison Officer, Chair PERIIA Network	Physical Science and Engineering	Centralised	ILO
CDTI (Centre for the Development of Industrial Technology)	Spain	Spanish ILO for ITER	Physical Science and Engineering	Centralised	ILO
CDTI, E.P.E.	Spain	ILO for ESO and SKA	Physical Science and Engineering	Centralised	ILO
Enterprise Ireland	Ireland	ILO for European Southern Observatory	Physical Science and Engineering	Centralised	ILO
STFC UKRI	United Kingdom	ILO	Physical Science and Engineering	Centralised	ILO
Teknologisk Institut	Denmark	BigScience.dk network coordinator, ILO for ESO, senior consultant	Physical Science and Engineering	Centralised	ILO
Big Science Sweden	Sweden	Director	Physical Science and Engineering	Centralised	ILO
Department of Industry, Science, Energy & Resources (Australia)	Australia	Industry Liaison Officer	Physical Science and Engineering	Centralised	ILO
CNRS	France	Director industrial relations, Innovation and valorisation - French ILO for SKA/ESO	Physical Science and Engineering	Centralised	ILO
Technology Centre CAS	Czechia	ILO for ESS	Physical Science and Engineering	Centralised	ILO
Lithuanian Innovation Centre	Lithuania	Industrial Liaison Officer	Physical Science and Engineering	Centralised	ILO
Ministère de l'Enseignement Supérieur, Recherche et Innovation	France	Industrial Partnership for French research infrastructures	Physical Science and Engineering	Centralised	ILO
CDTI	Spain	ILO & Proyect Manager	Physical Science and Engineering	Centralised	ILO
CDTI	Spain	ILO CERN, ESS, ESRF, ILL, XFEL	Physical Science and Engineering	Centralised	ILO
NOVA	Netherlands	NL ILO for ESO	Physical Science and Engineering	Centralised	ILO
Big Science Sweden and RISE Research Institutes of Sweden	Sweden	Senior Adviser Measurement Science and Technology	Physical Science and Engineering	Centralised	ILO
Big Science Sweden	Sweden	Business developer	Physical Science and Engineering	Centralised	ILO

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Framatome Kft.	Hungary	R&D team leader, ESRF and XFEL hungarian ILO	Physical Science and Engineering	Centralised	ILO
STFC - UKRI	United Kingdom	Head of Business Opportunities	Physical Science and Engineering	Centralised	ILO
STFC	United Kingdom	Assistant UK ILO to CERN	Physical Science and Engineering	Centralised	ILO
Big Science Sweden	Sweden	Business development	Physical Science and Engineering	Centralised	ILO
ukaea	United Kingdom	UK ILO for Fusion	Physical Science and Engineering	Centralised	ILO
ILO network of the Netherlands	Netherlands	ILO	Physical Science and Engineering	Centralised	ILO
Nikhef	Netherlands	ILO	Physical Science and Engineering	Centralised	ILO
UKRI-STFC	United Kingdom	UK ILO (SKA, ESS)	Physical Science and Engineering	Centralised	ILO
Danish Technological Institute	Denmark	Director	Physical Science and Engineering	Centralised	ILO
INPP-NCSR:Demokritos-Athens	Greece	Retirest Scientist -Former ILO and TTO-Advisor for the Industry-Representative @HEPTech			Other
Big Science Sweden	Sweden	Communication			Other
European Space Agency	Netherlands	Head of Earth Observation & Telecom Procurement Division			Other
Economic and commercial Representation of Belgium in Geneva	Switzerland	Economic and commercial Counsellor			Other
Teknologisk Institut	Denmark	Senior Consultant	Data Computing and Digital; Physical Science and Engineering	Distributed	Other
-	Greece	Technology Transfer Office			Other
INDUCIENCIA / INEUSTAR	Spain	Collaborative Projects Manager			Other
European Spallation Source ERIC	Sweden	Head of Supply, Procurement and Logistics Division			Other
Atlas Copco	Switzerland	Trainee			Other
CNR	Italy	permament technologist			Other
CERN	Switzerland	Head of Procurement and Industrial Services	Physical Science and Engineering	Centralised	Other
EATRIS	Netherlands	Advisor Innovation Support	Health and Food	Distributed	Other

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Webinar #4: Tips & Tricks to organise interactive digital events with industry and research infrastructures

Affiliation	Country	Position	ESFRI domain	RI Type	Category
GSI / HEPTech	Germany	Innovationmanager / Technology Liasion Officer	Physical Science and Engineering	Distributed	ICO
DESY ITT	Germany	Industry Relations Manager	Health and Food; Physical Science and Engineering	Centralised	ICO
CNRS LaMP	France	EU project manager	Environment	Distributed	ICO
ILL	France	German ILO for ESRF and ILL	I am not an ICO	Centralised	ICO
DESY	Germany	industry relations manager	Environment	Centralised	ICO
Euro-BioImaging Industry Board	Germany	Industry Board Coordinator	Health and Food	Distributed	ICO
IFIC	Spain	Innovation Agent	Data Computing and Digital; Energy	I am not an ICO	ICO
Facility for Antiproton and Ion Research (FAIR)	Germany	In-kind procurement; coordination of ILO network @ FAIR	Physical Science and Engineering	Centralised	ICO
Deutsches Elektronen-Synchrotron DESY	Germany	Industrial Liaison Scientist for MX	Physical Science and Engineering	Centralised	ILO
CDTI	Spain	Spanish Industrial Liaison Officer for the ITER project	Physical Science and Engineering	Centralised	ILO
CDTI, E.P.E.	Spain	ILO for ESO and SKA	Physical Science and Engineering	Centralised	ILO
CDTI	Spain	ILO & Proyect Manager	Physical Science and Engineering	Centralised	ILO
NOVA	Netherlands	NL ILO for ESO	Physical Science and Engineering	Centralised	ILO
Nikhef	Netherlands	ILO	Physical Science and Engineering	Centralised	ILO
Instruct-ERIC	France	trainee project manager	Data Computing and Digital	Distributed	Other
EurOPDX research infrastructure	Italy	research infrastructure Manager			Other
B2Match GmbH	Austria	Co-Founder			Other
Institut Laue Langevin	France	Student			Other
EATRIS	France	Education & Training Manager			Other
ESRF	France	ENRIITC Communication			Other
EATRIS	Germany	Training manager			Other
INEUSTAR / INDUCIENCIA	Spain	Collaborative Projects Manager			Other
CNR	Italy	permanent technologist			Other

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b2match	Austria	Sales Representative			Other
Helmholtz-Zentrum Berlin (HZB)	Germany	scientific employee	Physical Science and Engineering	Centralised	Other
B2Match	Austria	Sales Manager			Other
CLARIN	Netherlands	Training and Education	Social and Cultural Innovation	Distributed	Other
EATRIS	Netherlands	Advisor Innovation Support	Health and Food	Distributed	Other

Webinar #5: Strategies for SME interaction and participation in brokerage events

Organisation	Job Title	Country	Category	Gender	What is your main ESFRI domain?	What is your secondary ESFRI domain?
BELSPO	Expert Space TELECOM + ESO + ESO ILO	FR	ILO	F	Physical Science and Engineering	Data Computing and Digital
INEUSTAR / INDUCIENCIA	Project manager	ES	Other	F	Physical Science and Engineering	Energy
ELI-HU Non-profit Ltd.	senior project manager	HU	ILO	F	Physical Science and Engineering	None
CDTI	Spanish ILO for fusion	ES	ILO	F	Physical Science and Engineering	Energy
Instruct-ERIC		GB	ILO	F	Health and Food	Data Computing and Digital
EATRIS	Scientific Programme Manager	US	Other	F	Health and Food	None
		FI	ILO	F	Energy	Environment
EATRIS	Program manager	NL	I don't know	M	Health and Food	Data Computing and Digital
ESRF	CM	FR	Other	F	Physical Science and Engineering	None
			Other	F	Health and Food	None
Genomics Core Leuven	Coördinator & Business Developer	BE	I don't know	M	Health and Food	Data Computing and Digital
EATRIS	Scientific & SME Outreach Manager	NL	ICO	F	Health and Food	None
CDTI		ES	ILO	M	Physical Science and Engineering	Data Computing and Digital
		PL	ILO	F	Physical Science and Engineering	Data Computing and Digital

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STFC	Business Opportunities manager	GB	ILO	F	Physical Science and Engineering	Energy
PRACE - Partnership for Advanced Computing in Europe	Industry Liaison Officer	GB	ICO	M	Data Computing and Digital	None
		US	ILO	M	Energy	Physical Science and Engineering
		PT	ILO	M	Physical Science and Engineering	Energy
Nikhef	ILO	NL	ILO	M	Physical Science and Engineering	Data Computing and Digital
ILL		FR	ICO	F	Physical Science and Engineering	None
CLARIN	Training Officer	NL	ICO	F	Social and Cultural Innovation	Social and Cultural Innovation
Nomaten CoE NCBJ	Industry Liaison Officer	PL	ILO	M	Physical Science and Engineering	Energy
Institut Pasteur	Project manager MOSBRI project	FR	Other	F	Health and Food	Physical Science and Engineering

Webinar #6: Exploring new avenues for ILOs

Organisation	Job Title	Country	Category	Gender	What is your main ESFRI domain?	What is your secondary ESFRI domain?
CLARIN ERIC	member of the BoD	Germany	Other	M	Social and Cultural Innovation	Data Computing and Digital
UKRI STFC	UK ILO for SKAO and ESS	United Kingdom	ILO	F	Physical Science and Engineering	Data Computing and Digital
Consiglio Nazionale delle Ricerche	Beamline Responsible	France	ICO	M	Physical Science and Engineering	None
FinNuclear	Quality & Development	Finland	ILO	F	Energy	Environment
INPP"Demokritos"-Athens	Retired Scientist-Former ILO And TT Officer@CERN	Greece	ILO	M	Energy	Energy
HEPTech	Communication officer		Other	F	Physical Science and Engineering	Environment
Euro-BioImaging Industry Board	Industry Board Coordinator	Germany	Other	F	Health and Food	Data Computing and Digital
STFC	Business Opportunities manager	United Kingdom	ILO	F	Physical Science and Engineering	None
DESY PT	ILO Officer	Germany	ILO	M	Physical Science and Engineering	Energy

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CERICERIC	Senior Industrial Liaison and Technology Transfer Officer	United Kingdom	Other	F	Physical Science and Engineering	Energy
German Industrial Liaison Officer (im Auftrag des BMBFs) for ILL and ESRF	Dr	France	ILO	M	Physical Science and Engineering	Data Computing and Digital
INAF	Innovation promoter	Italy	ILO	F	Physical Science and Engineering	Physical Science and Engineering
EATRIS	Advisor Innovation Support	Netherlands	ICO	M	Health and Food	None
UZSM	Research administrator	Croatia	Other	F	Health and Food	Health and Food
Forschungszentrum Jülich	Institute Director RWTH Aachen University Professor and ESS ILO Germany	Germany	ILO	M	Physical Science and Engineering	Energy
Teknologisk Institut	Consulent	Denmark	ILO	M	Physical Science and Engineering	Environment
Institut Laue Langevin	Scientist	France	ICO	F	Physical Science and Engineering	Data Computing and Digital
Lithuanian Innovation Centre	Innovation consultant	Lithuania	ILO	M	Physical Science and Engineering	Data Computing and Digital
European XFEL	Industrial Liaison Office In-Kind Contributions Supply Chain Manager	Germany	ICO	M	Physical Science and Engineering	None
ANI	ILO	Portugal	ILO	M	Physical Science and Engineering	Energy
Elettra Sincrotrone Trieste	Postdoctorla Research Associate	Italy	Other	M	Physical Science and Engineering	Environment
CDTI	ILO CERN, ESS, ESRF, XFEL and ILL	Spain	ILO	M	Physical Science and Engineering	Physical Science and Engineering
CDTI	ILO for ESO and SKA	Spain	ILO	M	Physical Science and Engineering	None
CERN	Group Leader Knowledge Transfer Group CERN	null	Other	M	Environment	None
European Science Foundation	Science Officer	France	Other	F	Physical Science and Engineering	None
CNR	Tecnologo	Italy	ILO	F	Physical Science and Engineering	Data Computing and Digital
ESRF	Head of Biz Dev	France	ICO	M	Physical Science and Engineering	None
UniGE	KT Officer	Switzerland	Other	F	Physical Science and Engineering	None
Ministère de l'Enseignement Supérieur, Recherche et Innovation	chargé de mission	France	Other	M	Physical Science and Engineering	Data Computing and Digital
Facility for Antiproton and Ion Research FAIR	In-kind and industry liaison	Germany	ICO	F	Physical Science and Engineering	None
STFC	Assistant ILO	United Kingdom	ILO	M	Physical Science and Engineering	Physical Science and Engineering

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EATRIS	Scientific & SME Outreach Manager	Netherlands	Other	F	Health and Food	Health and Food
Technology Centre CAS	CZ ILO for ESO / ESS / FAIR	Czech Republic	ILO	M	Physical Science and Engineering	Energy
GSI/HEPTech	Innovation Manager	Germany	ICO	F	Physical Science and Engineering	Energy
ENEA	ILO	Italy	ILO	M	Physical Science and Engineering	Energy
EU-OPENSCREEN ERIC	Project Manager and ILO	Germany	ICO	M	Health and Food	None
Institut Laue-Langevin	ICO	United Kingdom	ICO	F	Physical Science and Engineering	None
DESY	ILO	Germany	ILO	M	Physical Science and Engineering	Physical Science and Engineering
European XFEL	Scientific Officer at ILO	Germany	ICO	F	Physical Science and Engineering	Energy

Webinar #7: Resolving issues on the path to public-private collaboration

Organisation	Country/Region	Job Title	Country/Region Name	Category	Gender	What is your main ESFRI domain?
National Center for Nuclear Research		Poland	ILO	F	Physical Science and Engineering	Data Computing and Digital
EU-OPENSCREEN	Project Manager and Industry Liaison	Germany	ICO	M	Health and Food	None
CETAF	Executive Director	Belgium	Other	F	Environment	Social and Cultural Innovation
EATRIS ERIC	Training Manager	France	Other	F	Health and Food	None
		United Kingdom	ILO	M	Energy	Environment
EUPATI	Networks and communication coordinator	France	Other	F	Social and Cultural Innovation	Data Computing and Digital
CETAF	Advocacy & Engagement Officer	Belgium	Other	M	Environment	Data Computing and Digital
		Switzerland	Other	M	Health and Food	Environment
ESRF		France	Other	F	Physical Science and Engineering	Physical Science and Engineering
BELSPO - Service Spatial	Attachée Space Telecom + ESO ILO	Belgium	ILO	F	Physical Science and Engineering	Physical Science and Engineering
Naturalis Biodiversity Center		Netherlands	Other		Environment	Environment

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Instituto de Física Corpuscular	Agente de Innovación	Spain	Other	F	Data Computing and Digital	Environment
EMSO ERIC	Communication and Industry Contact Officer	Italy	ICO	M	Environment	None
ELIXIR	Industry Officer	France	Other	F	Data Computing and Digital	Health and Food
		United Kingdom	Other	F	Health and Food	None
CDTI	Spanish ILO for ITER and other fusion related devices	Spain	ILO	F	Energy	Physical Science and Engineering
ESRF	Business Development Engineer	France	ICO	M	Physical Science and Engineering	Energy
	Advisor Innovation Support	Netherlands	ICO	M	Health and Food	None
Elettra - Sincrotrone Trieste S.C.p.A.	Industrial Liaison Officer	Italy	ICO	F	Physical Science and Engineering	Energy
ANI	ILO	Portugal	ILO	M	Physical Science and Engineering	Energy
		Netherlands	Other	F	Health and Food	None
CDTI E.P.E.	ILO for ESO and SKA	Spain	ILO	M	Physical Science and Engineering	Data Computing and Digital
INPP-'NCSR-Demokritos'		Greece	ILO	M	Physical Science and Engineering	Energy
Naturalis Biodiversity Center		United Kingdom	Other	M	Environment	Data Computing and Digital
NWO/SRON	policy officer	Netherlands	ILO	M	Physical Science and Engineering	None
		Italy	ILO		Health and Food	None
UMCG	Business Developer	Netherlands	Other	F	Health and Food	None
		United States	Other	M	Environment	None
		Netherlands	Other	M	Health and Food	None
ELIXIR	Tools plaform coordinator	United Kingdom	Other	F	Data Computing and Digital	Health and Food
Nikhef	ILO	Netherlands	ILO	M	Physical Science and Engineering	Data Computing and Digital
ESRF	head of bizdev	France	ICO	M	Physical Science and Engineering	None

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Ministère de l'Enseignement Supérieur, Recherche et Innovation	Chargé de mission infrastructures de recherche - industrie	France	Other	M	Physical Science and Engineering	Data Computing and Digital
		Brazil	ICO	F	Health and Food	None
STFC	Assistant UK ILO for CERN	Switzerland	ILO	M	Physical Science and Engineering, Data Computing and Digital	None
EATRIS	Scientific & SME Outreach Manager	Netherlands	Other	F	Health and Food	None
Fusion for Energy	Group Leader - Market Analysis	Spain	ICO	M	Physical Science and Engineering	Energy
Organisation	Job Title	Country	ILO/ICO	Gender	What is your main ESFRI domain?	

Webinar #8: Towards a broader and enhanced ENRIITC ILO & ICO network

Organisation	Country/Region	Job Title	Country/Region Name	Category	Gender	What is your main ESFRI domain?	What is your secondary ESFRI domain?
PRACE - Partnership for Advanced Computing in Europe	BE	Industry Liaison Officer	Belgium	ICO	M	Data Computing and Digital	Physical Science and Engineering
Swiss ILO Office	CH	Head of Office	Switzerland	ILO	M	Physical Science and Engineering	Energy
CERN	CH	Speaker	Switzerland	ILO	F	Physical Science and Engineering	None
Technology Centre CAS	CZ	ILO for ESS / FAIR / ESO / ILL	Czech Republic	ILO	M	Physical Science and Engineering	Data Computing and Digital
Helmholtz-Zentrum Hereon	DE	Industrial Relations Officer	Germany	ICO	M	Physical Science and Engineering	Energy
Deutsches Elektronen-Synchrotron DESY	DE	Research Manager	Germany	Other	F	Physical Science and Engineering	Data Computing and Digital
Danish Teknologisk Institut	DK	Speaker	Denmark	ILO	M	Physical Science and Engineering	None
Induciencia / Ineustar	ES	Head of Projects Dept.	Spain	Other	F	Physical Science and Engineering	Energy

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CDTI	ES	Spanish ILO for ITER and other fusion related devices	Spain	ILO	F	Energy	Physical Science and Engineering
CDTI	ES	ILO for ESO and SKAO	Spain	ILO	M	Physical Science and Engineering	Data Computing and Digital
Fagor Automation	ES	Marketing Manager	Spain	Other	M	Physical Science and Engineering	Physical Science and Engineering
Consorcio ESS Bilbao	ES	Management Office	Spain	Other	F	Physical Science and Engineering	Energy
Ineustar	ES	Geenral Manager	Spain	Other	M	Physical Science and Engineering	Energy
ESRF	FR	ENRIITC Comm Manager	France	Other	F	Physical Science and Engineering	None
ILL	FR	ICO	France	ICO	F	Physical Science and Engineering	None
STFC	GB	Assistant UK ILO for CERN	United Kingdom	ILO	M	Physical Science and Engineering	None
Instruct-ERIC	GB	project manager	United Kingdom	ICO	F	Health and Food	Health and Food
European Synchrotron	GF	Head of Biz Dev	French Guiana	ICO	M	Physical Science and Engineering	None
EMSO ERIC	IT	Communication Officer	Italy	Other	M	Environment	Environment
Ceric Eric	IT	Industrial Liaison and Technology Transfer Officer	Italy	ICO	F	Physical Science and Engineering	Energy
Nikhef	NL	ILO	Netherlands	ILO	M	Physical Science and Engineering	Data Computing and Digital
EATRIS	NL	Advisor Innovation Support	Netherlands	ICO	M	Health and Food	None
DARIAH-CLARIN	NL	Speaker	Netherlands	ICO	F	Social and Cultural Innovation	None
DARIAH-ERIC	NL	integration officer	Netherlands	ICO	F	Social and Cultural Innovation	None
CLARIN ERIC	NL	executive director	Netherlands	Other	F	Social and Cultural Innovation	None
ANI	PT	ILO	Portugal	ILO	M	Physical Science and Engineering	Energy
European Spallation Source ERIC	SE	Grant officer	Sweden	Other	F	Physical Science and Engineering	Physical Science and Engineering
Big Science Sweden	SE	Director	Sweden	ILO	F	Physical Science and Engineering	None

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European Spallation Source ERIC	SE	Grant Support	Sweden	Other	F	Physical Science and Engineering	None
FAIR	US	ICO	United States	ICO	F	Physical Science and Engineering	None

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Appendix II Training evaluation form

1. How did you find out about this webinar? (social media / newsletters/ word of mouth / other)
2. Please rate the relevance of the webinar to your work as ILO or ICO (1-10)
3. Please rate the speakers and the relevance of their presentations to the webinar topic (1-10)
4. Please rate the level of interaction between the speakers and participants (1-10)
5. Do you consider the duration of the webinar appropriate to its objectives? (Yes, No – too short, No – too long)
6. What would you improve or change for upcoming *ENRIITC your Knowledge* webinars? (text)
7. As a follow-up to this webinar, please suggest further topics for ENRIITC training and organisational activities (text)

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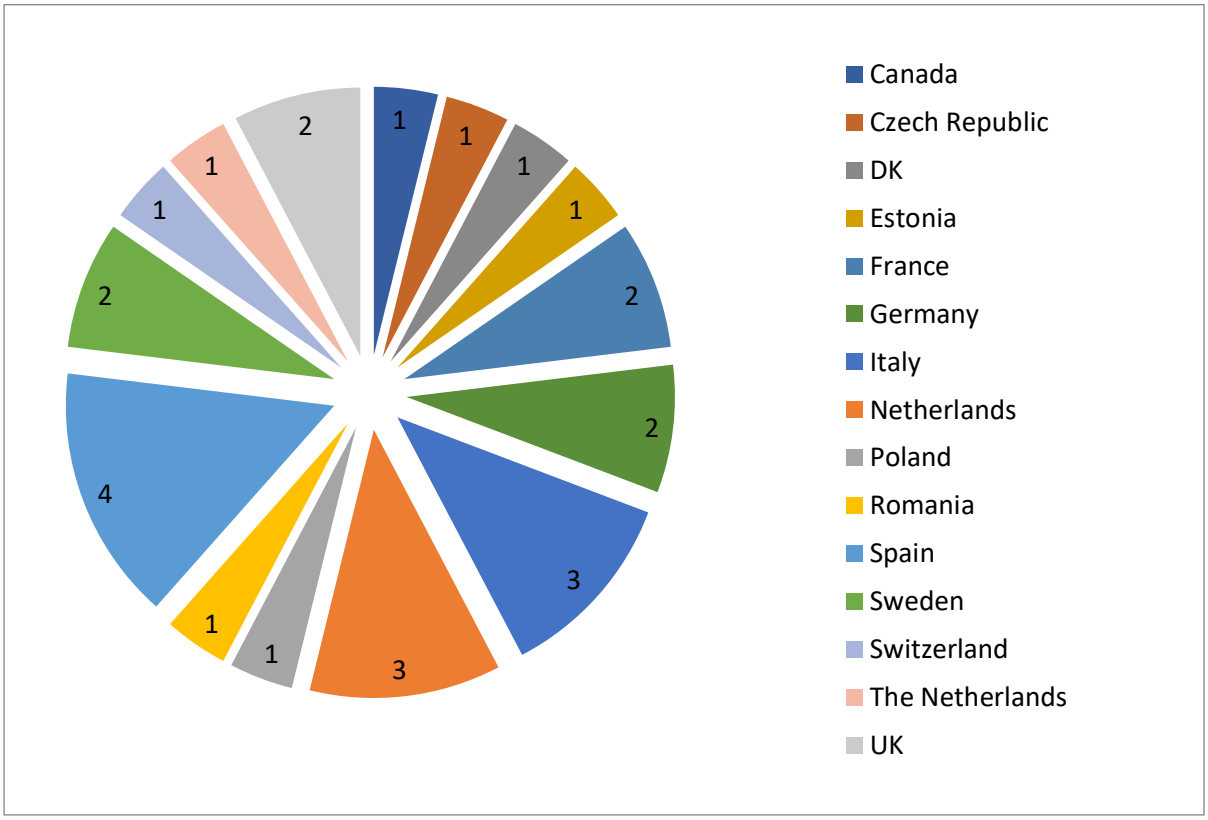
Appendix III Webinar #3: COVID-19 impact on Big Science industry questionnaire and results

1. What country are you from?



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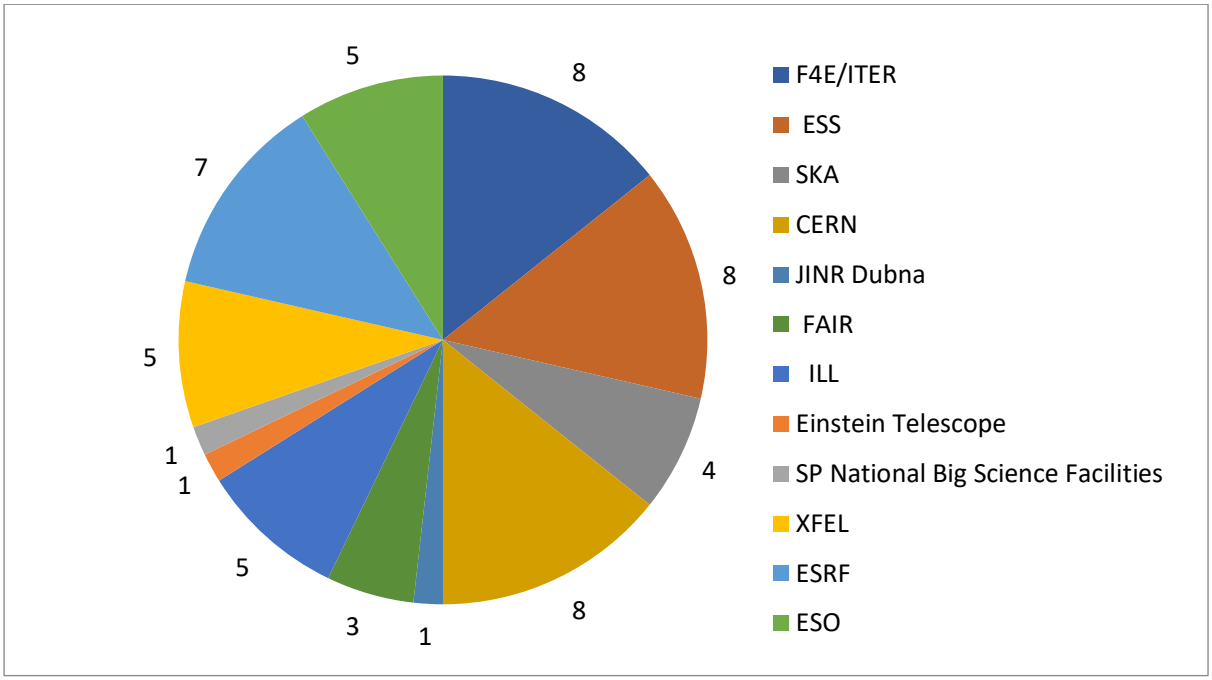
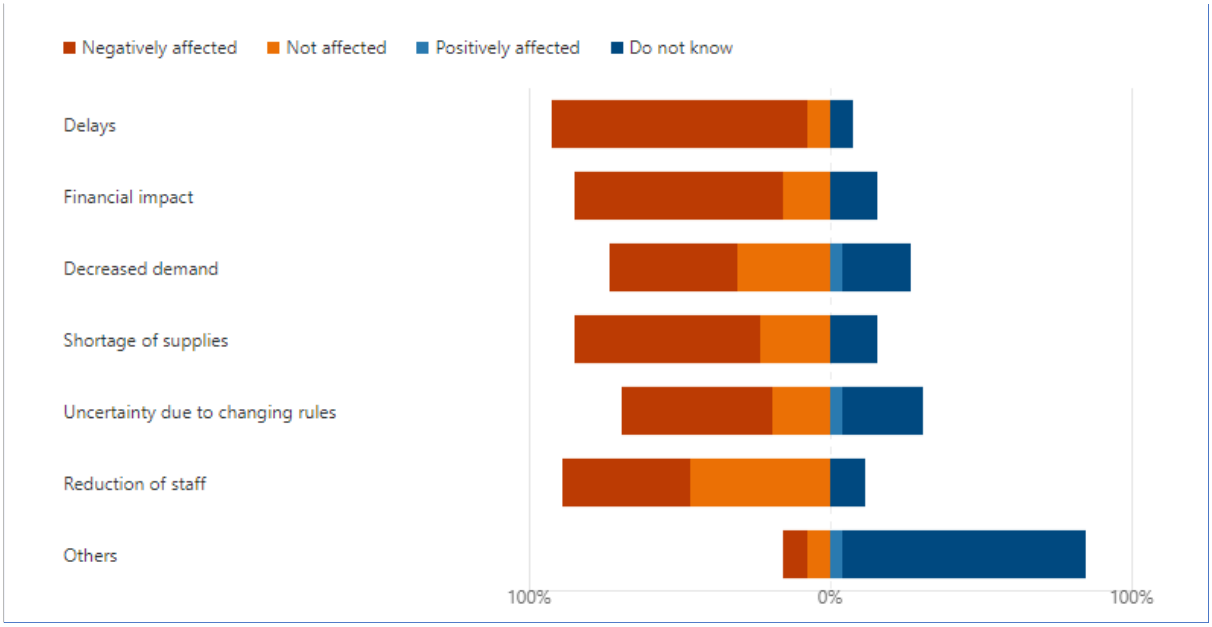
2. Which RIs are you ILO for?



3. After one year of pandemic, which is the main impact of COVID 19 pandemic on your national industry?



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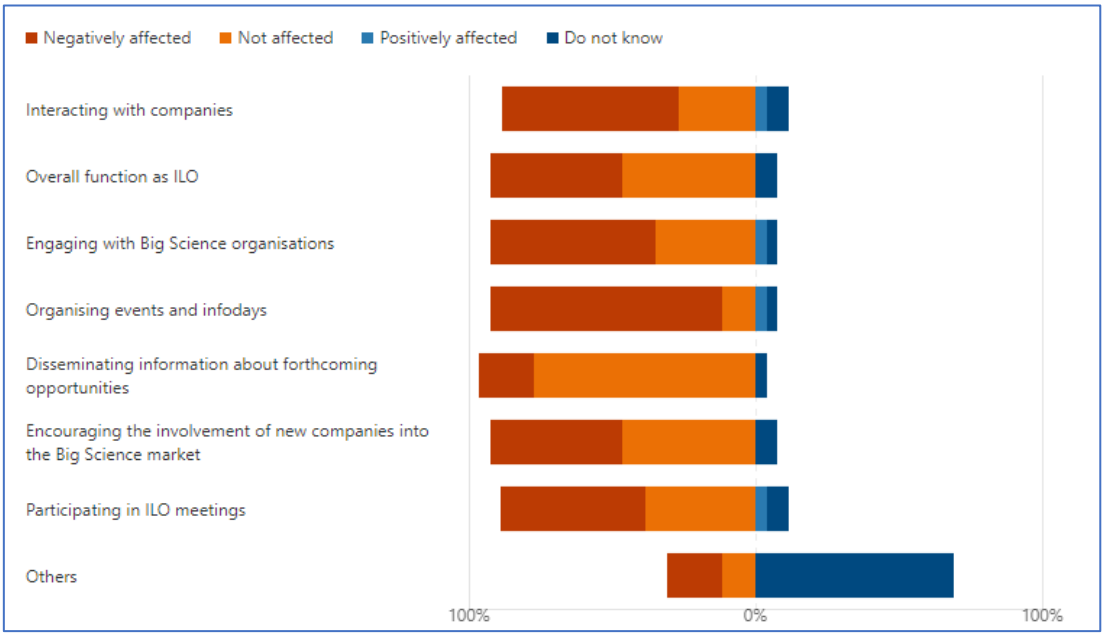
4. How would you assess the change in the overall situation of your national Big Science industry after one year of the pandemic?

5. How are SMEs affected by the COVID-19 pandemic in your country?

6. How has your work performing the following ILO tasks been affected by the COVID-19 pandemic?



7. How would your industry value the following measures to mitigate COVID-19 impact on future opportunities?

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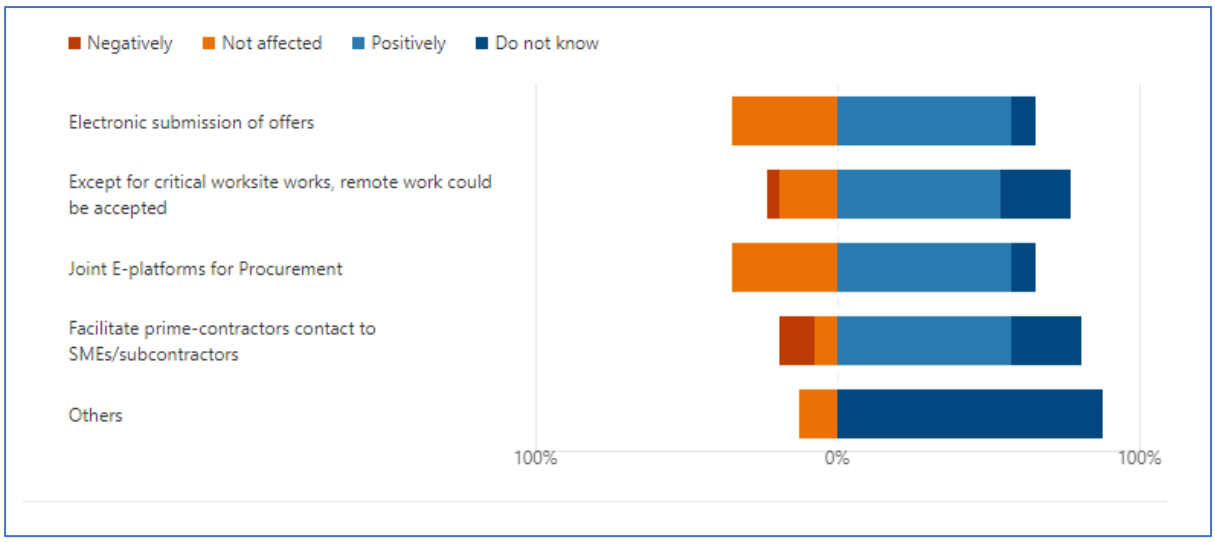
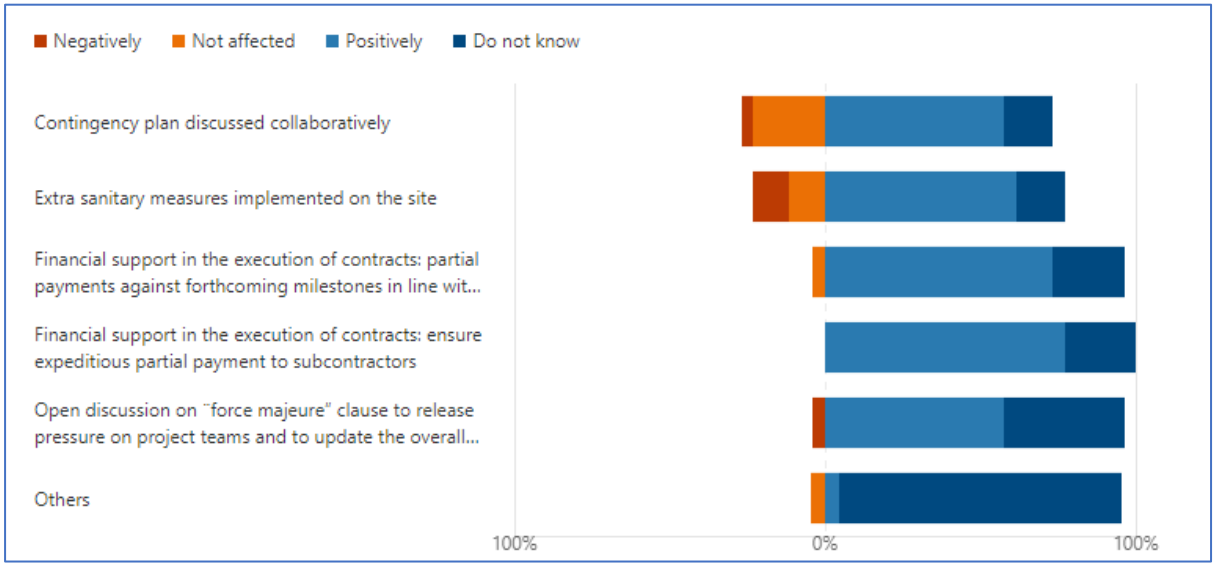


8. How would your industry value the following measures to mitigate COVID-19 impact on on-going contracts?



9. Do you consider that SMEs would require the implementation of a special set of measures supporting them on the Big Science market?

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10. Which kind of measures would you suggest to relevant international authorities (Big Science organisations, European Commission, etc.) in order to support SMEs and industrial participation in Big Science market after one year of pandemic?
    - *Big science market has to be managed as an important sector for innovation and economic development for the European Competitiveness in the world. For this reason it needs specific measure from EU Institutions even in the context of Next generation EU. At the same time BSOs have to work much more coordinated in the way to treat the pandemic effects. Define and communicate clearly on a support strategy for SMEs involved in the Big Science market using the 700 Billion EU Next Generation Plan.*
    - *More emphasis on smaller contracts*
    - *Be more relaxed about issues caused by COVID; do not apply possible penalty clauses.*
    - *SMEs require real payments, sometimes partially up-front, especially for long duration contracts. For them it is impossible to operate in an environment, where Big Science organisations require bank guarantees for up to 100% of the contract value, upon final delivery.*
    - *More discussions on deadlines and understanding of delays; increased physical access as soon as possible*
    - *Free software for matchmaking events.*
    - *Support with a safety net, take part of the risk...*
    - *Simplify procurement process in the case of low value tenders*
    - *Contracting strategies that take into account the risks associated with working with BSO - [for non COTS equipment or services]*
    - *Try to relax as much as possible the financial requirements for SMEs to access tenders.*
    - *Reimbursement of the effort to make an offer to the complicated tenders in case the offer was competitive.*
    - *Provide industry and SMEs with a global overview of the volume of Big Science markets accessible over 2 years, 5 years and 10 years (short and long term vision), at European and international level*
    - *Give visibility on a fragmented market*
    - *Continue BSBF organisation every 2 years*
    - *Encourage Big Science organisations to work together to harmonize their purchasing practices and processes*
    - *Help facilitate consortia*
    - *Support with education*
    - *Support with network and relation building*
    - *Support in making technical people at the facilities available for discussions with SME*
    - *More flexibility for the delays of the deliveries.*
    - *More flexibility for delivery*
    - *Financial support for employment preservation*

11. Please write here any other comment or suggestion if you wish to contribute to the PERIIA & ENRIITC webinar on Industrial impact in Big Science market after one year of COVID pandemic
    - *Working towards a common set of basic procurement rules and such that companies only have to read the particulars for a specific BSO to provide a proper quote.*
    - *What has changed for SMEs after ENRIITC was launched. What have we achieved so far? It is useful to show results. Try to quantify them.*
    - *Mapping of good tools & practices developed during COVID-19 that should be implemented in the future "normal" operation*
    - *Big Science Market should be considered as an strategic sector in pandemic times*

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- *It would be interesting to know the impact of COVID on the Big Science market (Physical Science and Engineering) compared to other ESFRI domains.*

12. Please indicate PERIIA, which others matters would be interesting for your work
    - *Technology transfer and exchange of experiences among ILOs*
    - *Better define PERIIA / ENRIITC objectives. How to make them more result oriented*
    - *Co-development between facilities and SMEs*
    - *Sharing success stories concerning ILO initiatives*
    - *Why do many software-related tenders need manpower on-site?*
    - *COVID impact as well the nature of this work suggest this restricts competition.*

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Appendix IV Agenda for ENRIITC final event training session

ENRIITC @BSBF
Training sessions in association with CERIC-ERIC
Preliminary draft programme, 4 October 2022

8:30 – 8:40	Welcome coffee	
8:40 – 8:45	Introduction	
8:45 – 10:30	Session 1: training for ICOs and ILOs **How to better communicate RIs'value to industry and how to better relate to it**	
	Expert storytelling and interactive session, part 1	Carlos Alvarez, Startup board member, Marketing Director at KIM & Senior Consultant. Anna Serra Muns, Director, Commercialization and Communications, Parc Científic de Barcelona PERIIA representative (TBC)
10:30 – 10:45	Coffee break	
	Expert storytelling and interactive session, part 2	• Ian Tracey, Anchored In LTD, Founder • RI VIS *TBC*
11:45 – 13:00	**Session 2 - ENRIITC networking conference:** **"Towards a sustainable platform to support RI-industry engagement in the new ERA"**	
11:45	ENRIITC introduction	
11:55	RI-ICO representative on value of an ICO network	
	ILO representative on the role of ILOs and their impact (*something on the need for professionalisation/expansion of role for stronger impact)*	
	RI in innovation ecosystem: impact potential *(something linked to the hub and the important value of RI in this ecosystem)*	
	EC representative on RI-industry in ERA – *Patricia Postigo Mclaughlin*	
	Conclusions	
13:00 – 14:00	Networking lunch	
14:00 – 16:30	Session 3 – *in parallel*:	
	ILOs. Second Part.	PERIIA General Assembly Meeting: The PERIIA Network has the aim of paving the way and preparing for the initiation of the Pan-European Research Infrastructure ILO Association as a formal European association https://www.periia.eu/
	ICOs Second Part Marketing and potential collaboration opportunities.	Companies presenting challenges for RIs/Research Centers, presentation of cases of collaboration and capabilities.
14:00 – 15:00	Focused on opportunities for analytical services and experience	Speakers • Simone Jacques, director at Finden LTD • Alberto Ansaldo, ASG Superconductors • Prof Vladimir Matolin, CEO at LEANCAT s.r.o,
15:00 – 15:15	Coffee break	Jointly with PERIIA

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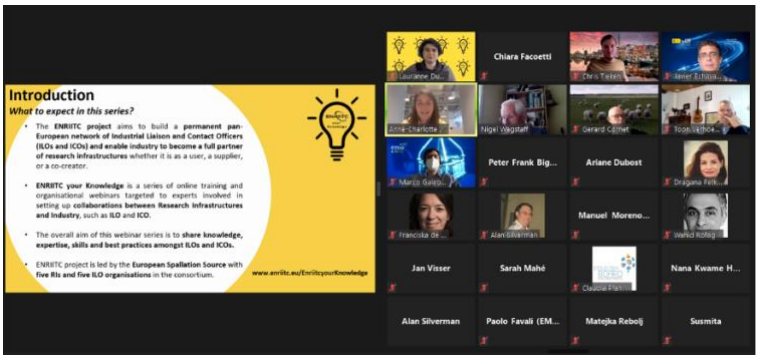
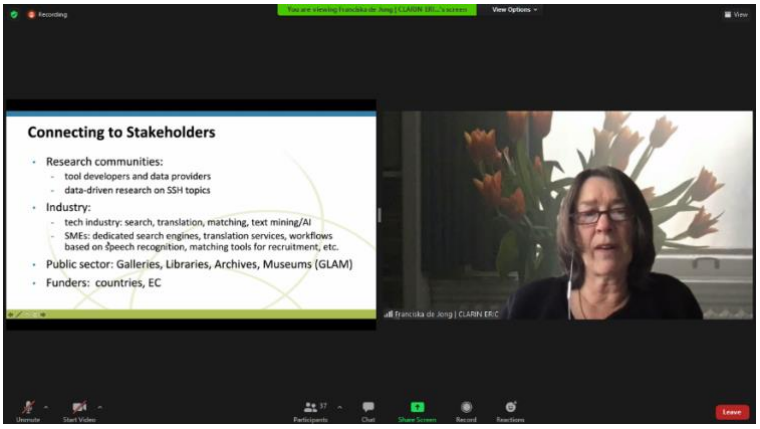
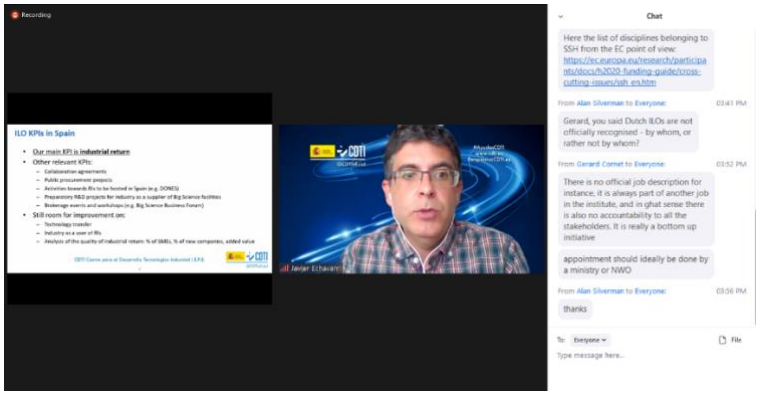
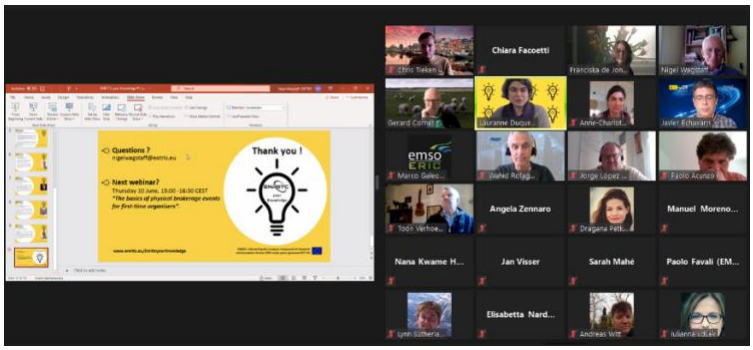
Appendix V Webinar screenshots

Webinar #1 - The ILO and ICO roles for beginners









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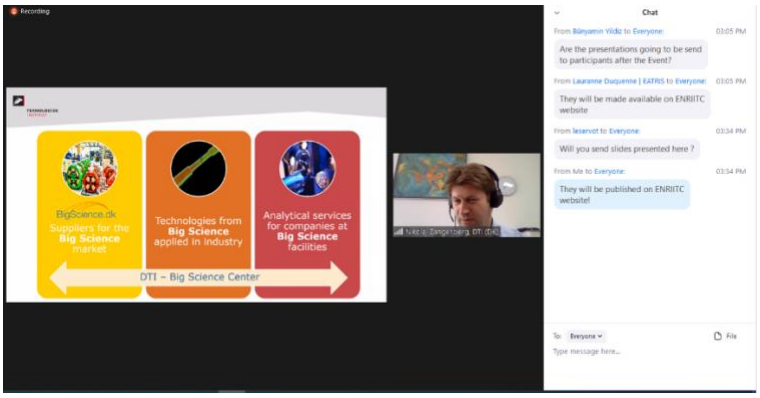
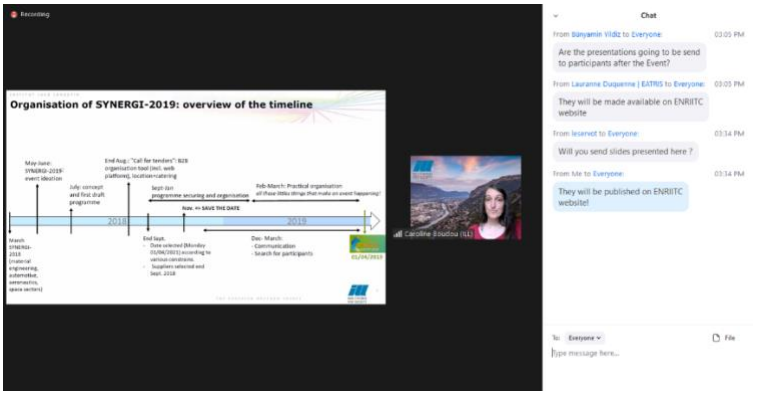
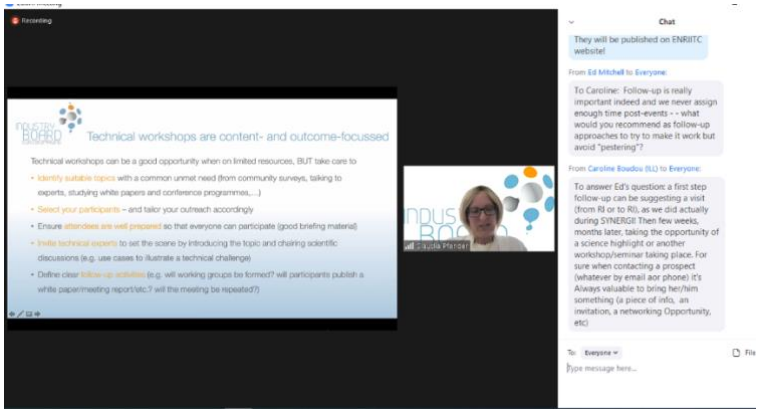
Webinar #2 - The basics of physical brokerage events for first-time organisers







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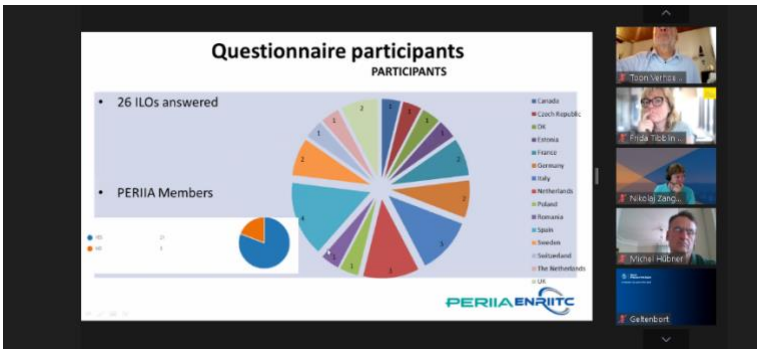
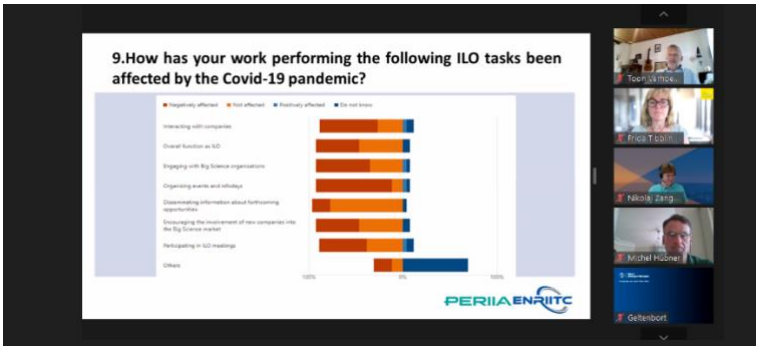
Webinar #3 - Industrial impact in Big Science market after one year of COVID pandemic





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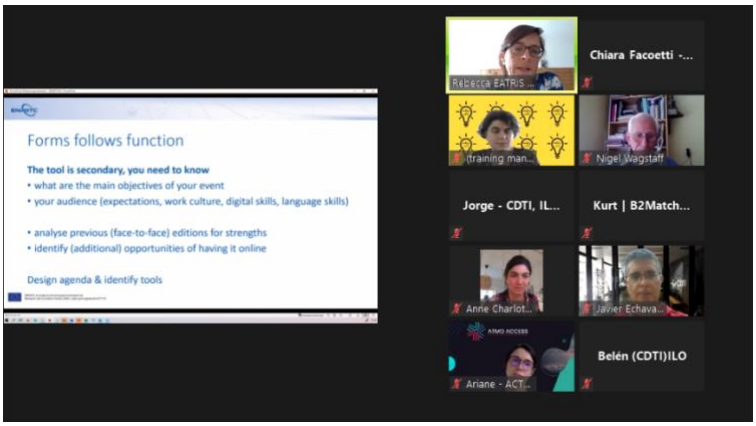
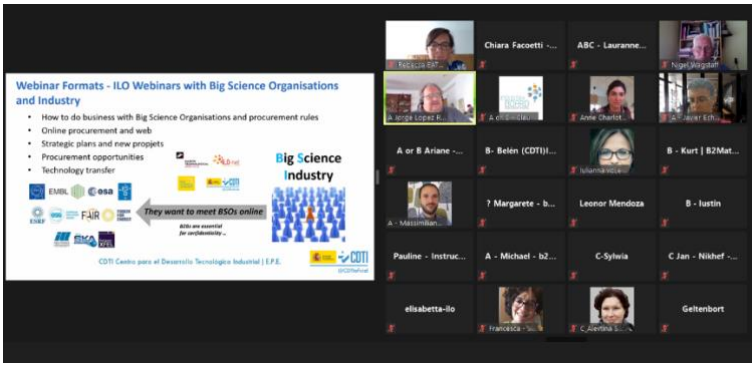
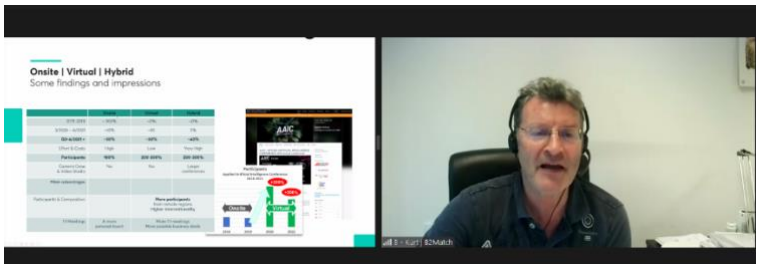
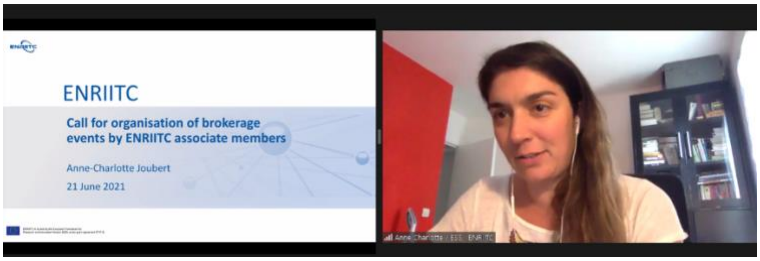
Webinar #4 - Tips & Tricks to organise interactive digital events with industry and research infrastructures









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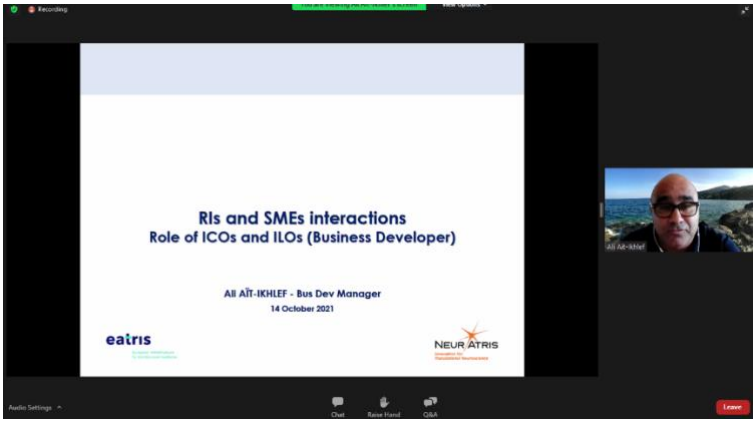
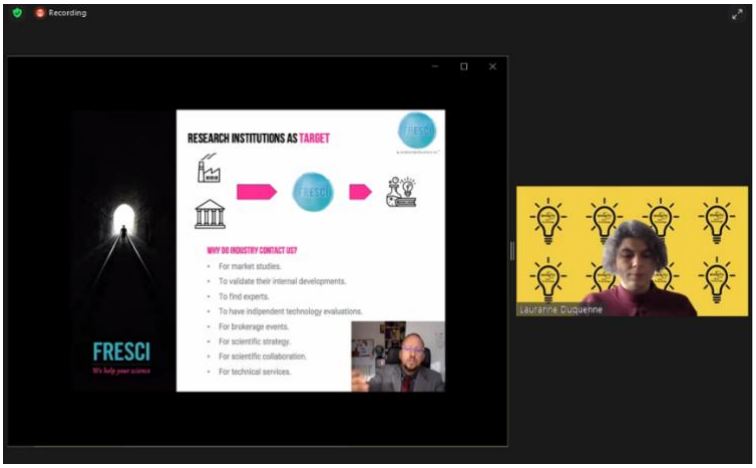
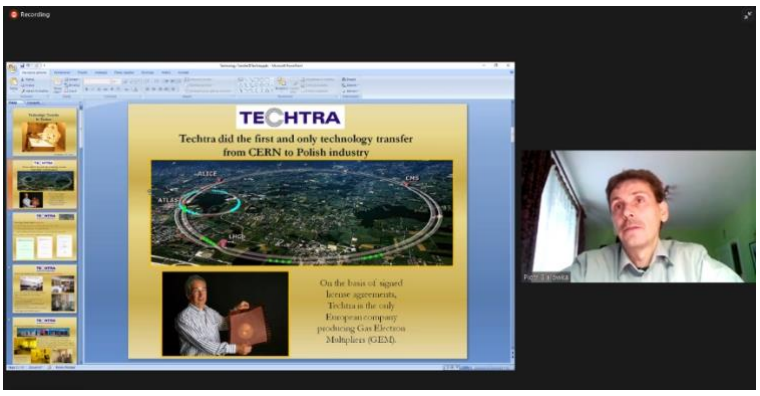
Webinar #5 - Strategies for SME interaction and participation in brokerage events







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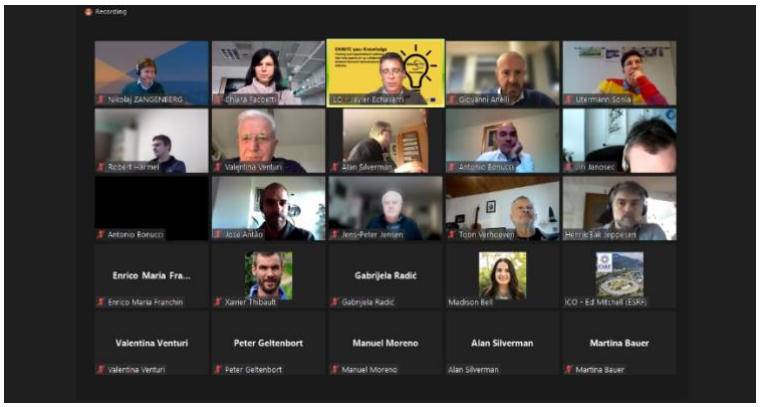
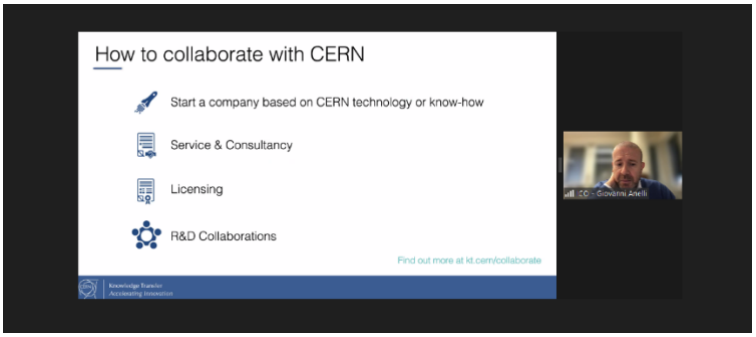
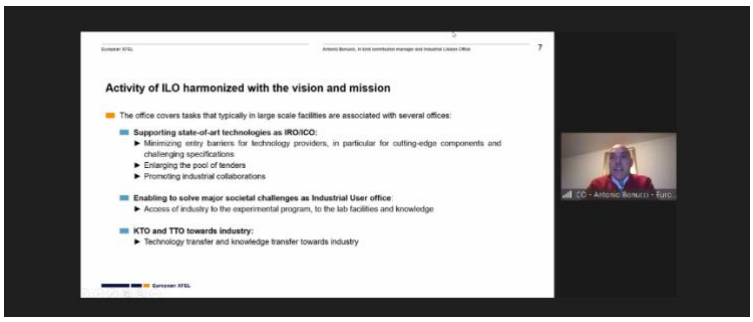
Webinar #6 - Exploring new avenues for ILOs – knowledge transfer to industry and use of research infrastructures







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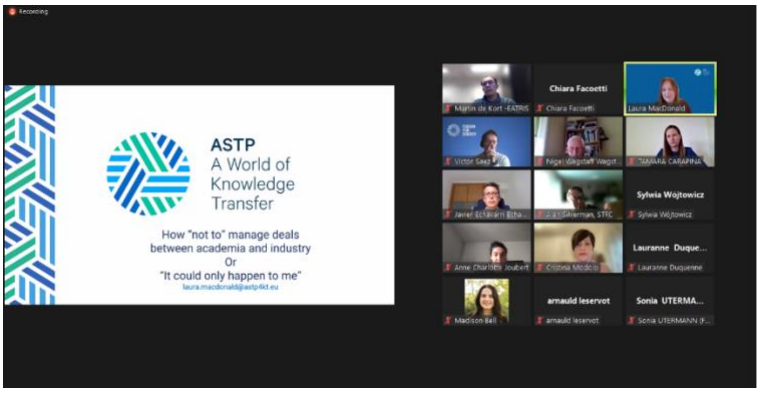
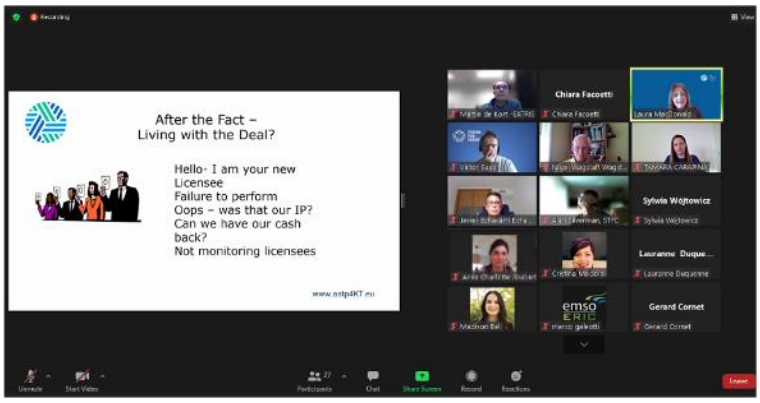
Webinar #7 - Resolving issues on the path to public-private collaboration





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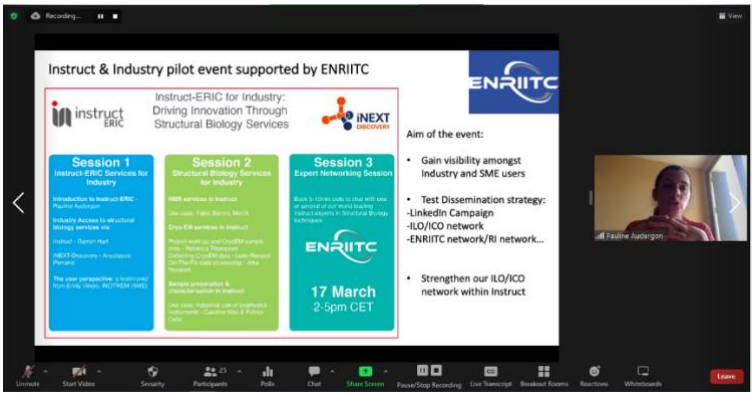
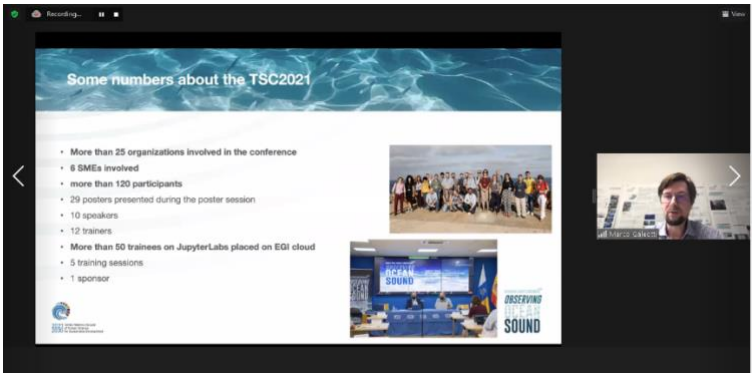
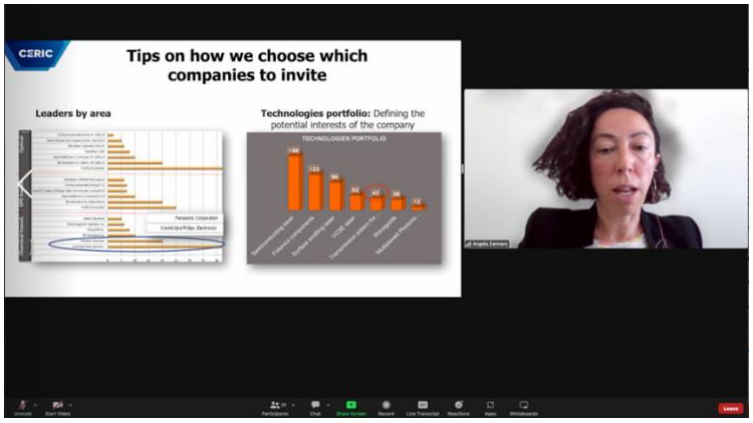
Webinar #8 - Broadening the scope towards an enhanced ENRIITC ILO & ICO network







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