

WP5 - Creating Impact CMI



Overview of tasks

Task 5.1 Knowledge transfer

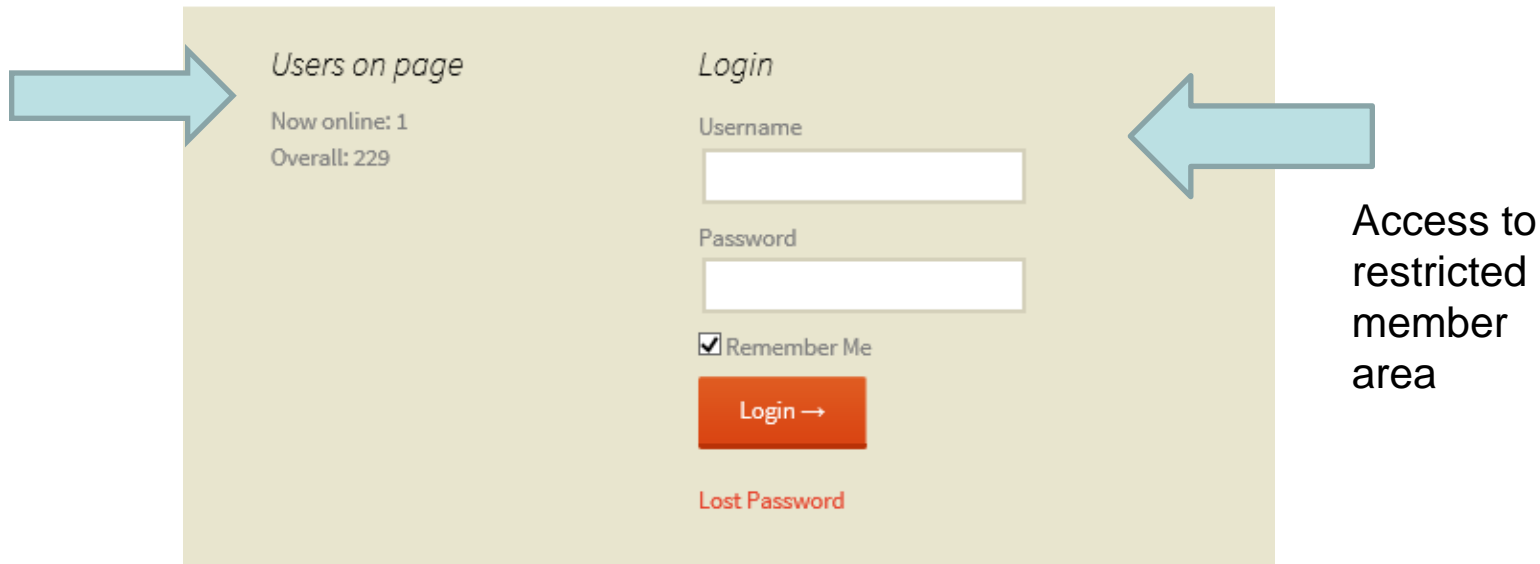
Task 5.2 Training

Task 5.3 Uptake and exploitation



- Website
- Stakeholders Committee
- Academic publications
- Conferences

Activity number	Activity description	Partners
A5.1.1	A website will be created with public access and a part restricted for partners only. The website will be updated every six months. The public website will include, for example, information about workshops, public reports, presentations and publications. The usage statistics of the website will be monitored to ensure effective and targeted stakeholder engagement. The restricted members section of the website will be used for uploading reports and other relevant documents to allow easy access for the partners to those files. The website will be administrated by the WP leader CMI.	CMI, all partners



Users on page
Now online: 1
Overall: 229

Login
Username

Password

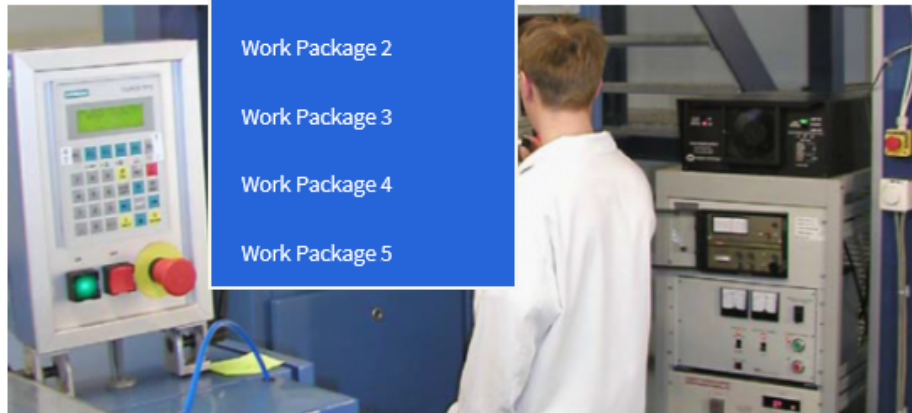
 Remember Me

[Lost Password](#)

Access to restricted member area



Metrology for the photonics industry – optical fibres, waveguides and applications



- Work Package 1
- Work Package 2
- Work Package 3
- Work Package 4
- Work Package 5



Optical fibres, waveguides and applications

The aim of the Joint research project **Metrology for the photonics industry** is to develop measurement techniques for dimensional and optical characterisation of advanced photonic components and devices in

Recent Posts

9M Progress Review Meeting

Project meeting at Espoo

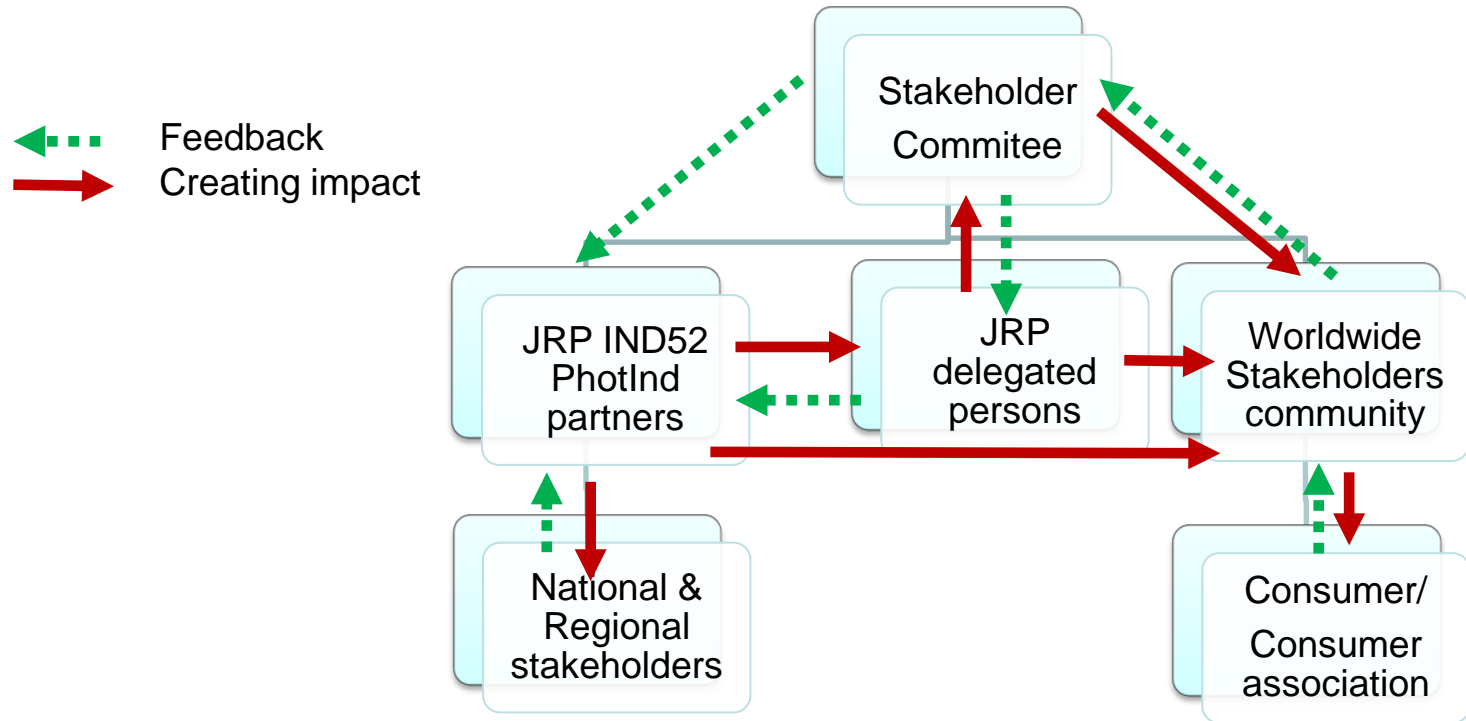
Activity number	Activity description	Partners (Lead in bold)
A5.1.2	<p>The Consortium will establish a Stakeholder Committee (SC) made up of experts from the user community and stakeholders during the project kick-off meeting. The aim is for the SC to have at least 15 members from at least 10 different organisations. The contacts with the European Photonics Industry Consortium (EPIC) will be exploited to attract as high a level of stakeholders as possible. The role of the SC will be to guide and advise the consortium on best addressing the needs of the community. The SC will be invited to the project meetings and will be regularly informed of the progress within the project. (Parts of the project meetings are open for stakeholders and other parts are for project partners only.)</p> <p>The terms of reference of the SC will include:</p> <ul style="list-style-type: none"> • Dissemination of information regarding the progress of the project to those working in the field and ensuring that the standards, facilities and procedures being developed are in line with the requirements of these experiments. • Dissemination of information to the user community regarding potential impact of the project and ensuring that end-user requirements are accounted for in the outputs of the project. 	CMI, all partners



Stakeholders and Collaborators

- **A stakeholder** is a company which has signed a [letter of support](#) for the project (saying that what we are doing is interesting).
- **A collaborator** is a company which has signed a "[letter of exchange](#)", that is an engagement to follow and eventually participate in the work we are doing (like providing samples or equipments, attending meetings, etc...).
- The Collaborators and Stakeholders shall be identified on the website.

- **Terms of Reference** of the Stakeholders Committee
- The primary role of the **Stakeholder Committee of the JRP 14IND13 PhotInd** is to ensure fruitful interaction with stakeholders representing various interests in the photonics industry.





Establishment of the Stakeholders Committee

- Stakeholders Committee meetings:

The stakeholder committee will be established during the First Stakeholder Meeting in ????? 2016, and further meet at least three times (when???).

A5.1.3	<p>The scientific results of this project will be submitted to peer-reviewed journals. The consortium will submit at least 10 publications in peer-reviewed journals.</p> <p>The following journals will be targeted:</p> <ul style="list-style-type: none"> • Metrologia • Optics Letters • Optics Express • Applied Optics • Applied Physics B: Lasers & Optics • Review of Scientific Instruments • Journal of Geophysical Research-Atmospheres • Atmospheric Measurement Techniques • Measurement Science and Engineering • Nature Communications • Optics Communications • Advanced Optical Materials • IEEE Photonics Technology Letters • IEEE Journal of Photonics • IEEE Journal of Selected Topics in Quantum Electronics • Journal of Lightwave Technology • Laser & Photonics Review <p>Additional peer-reviewed journals or books may be targeted during the lifetime of the project.</p> <p>The authors of the peer-reviewed papers will clearly acknowledge the financial support provided through the EMPIR as required by EURAMET.</p>	CMI , all partners
A5.1.4	<p>At least two papers on a project overview or interesting results will be submitted to trade journals or other similar journals, which are targeted to the community in the photonics industry, e.g.</p> <ul style="list-style-type: none"> • Optics & Photonics New • Photonics Spectra • Lightwave • European Photonics Industry Consortium, web news http://www.epic-assoc.com/membership/member-news/ 	CMI , all partners

Papers/articles

- Must be open-access (see next slides)
- Must acknowledge EMPIR funding – see bullet point below. The red text must not be changed, but you can edit blue text as appropriate, and cite multiple projects (EMPIR-related or not).
 - The work reported in this paper [(was funded by)/(was partially funded by)/(etc)] [(project EMPIR 14IND13 PhotInd) / (projects EMPIR 14IND13 PhotInd, other project names). This project has received funding from the EMPIR programme co-financed by the Participating States and from the European Union’s Horizon 2020 research and innovation programme.
 - If you use the EMPIR badge then you fulfil your contractual obligations – see next slide

Webpage

- Copies of all publications must be available from the project webpage
- These can be links to the Journal of publication, or a post-print (before it has been formatted by the Journal – a version to which the authors retain copyright)

Repository

- Copies of all publications must be placed in the EMPIR open-access depository.
- These can be open-access papers, or post-prints (before it has been formatted by the Journal – versions to which the authors retain copyright)
- This is the authors’ responsibility – but please inform WP4 manager (MS) when this is carried out.



The EMPIR initiative is co-funded by the European Union's Horizon 2020 research and innovation programme and the EMPIR Participating States

This logo is also located in the WP5 folder:

The EMPIR policy described by Paula Knee (EURAMET Impact & Exploitation Manager):

“Open access is **a requirement** in all EMPIR contracts (and all H2020 contracts) and there is **no flexibility** on this. There has been no change, this is included in your contract. Therefore you cannot ‘count’ non-open access publications as outputs of the project. And, more importantly, all EMPIR publications **must** be open access – no other option is allowed by the contract. Please read the exact detail in the contract as open access includes two options: (i) immediate open access (i.e. on publication); (ii) making open access 6 months after the initial publication - this is in line with the open access policies of many (but not all) journals.”

The open access definition used by the Commission includes:

1. **Immediate open access on publication** (all **final peer-reviewed scientific publications** or machine-readable copies of the published version), or
2. **Access no more than 6 months after publication**

The first option is met by a journal that either allows immediate (free of charge) open access or offers **gold open access**. The second option is essentially a **green open access** model – **as long as** the journal’s embargo period is **no more than 6 months**. It is up to the project partners to select an appropriate open access option for each peer-reviewed article.

The updated version of the EURAMET Repository has been designed to facilitate these options by allowing users to specify a date when the article can be made public (if it is not immediate).

Look up the journal on: <http://www.sherpa.ac.uk/romeo/index.php>, which lists publisher open access policies.

Double check OA policy rules on the particular publisher's website. Publisher policies differ so be clear on the specific rules for the selected journal and follow the rules.

Green mode open access means:

- putting a **final peer-reviewed manuscript (Post Print version)** on the EURAMET repository and setting a post-publication **embargo period of no more than 6 months**.

*If the specific publisher green open access policy allows this then do this. If the publisher policy permits a shorter embargo period then use that. **The embargo period must be no longer than 6 months.***

If the publisher green open access policy requires a longer embargo period (e.g. 12 months or longer) then use gold mode open access.

This means paying a gold mode publishing fee to the publisher (average cost about £1500 but may be more or less) and claim this cost as part of your funding.

Gold mode makes your article immediately free on the publishers website, so your article can also be made available on the EURAMET repository.

Check the publisher's gold mode policy about which version of your article you can post immediately on a repository (this may be the final published version or it may be a final peer-reviewed manuscript).

Publishers also usually require a link back to the publisher website and a copyright statement (the wording is given in the publisher policy).

Supply these to the EURAMET repository as part of your submission.

13.5. JRP-Partners shall provide an electronic copy of papers accepted for publication for inclusion in the EURAMET Open Access Repository.



- Article (Journal) (a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication)
- Good Practice Guide
- Proceedings
- Technical report
- Master thesis
- PhD thesis
- Book
- Contribution to book



Upload to the Repository on the EURAMET website:

<https://www.euramet.org/get/research-publications-repository/submit-a-publication/>

http://msu.euramet.org/downloads/documents/MSU_repository_instructions.pdf

A5.1.5 The partners plan to present at least 10 presentations at international conferences.

- NEWRAD 17: New Developments and Applications in Optical Radiometry.
- Metrologie 2015, September 21–24, 2015, Paris, France.
- Nanoscale 2015/2016
- CLEO
 - 2015 May 10–15, San Jose, USA
 - 2016, June 5–10, 2016, San Jose, USA
 - 2017, 2018, planned for May–June, San Jose, USA
- CLEO/Europe–EQEC
 - 2015: June 21–25, Munich, Germany,
 - 2017:
- SPIE conferences
- EOSAM 2016
- ASSL
 - 2015: October 4–8, Berlin, Germany
 - 2016, 2017:?
- Photonics West,
 - 2016: Planned for February, San Francisco, USA
 - 2017, 2018: Planned for February, USA
- OFC (Optical Fiber Communication Conference)
 - 2016: March 20–24, Anaheim, USA
 - 2017: March 19–23, Los Angeles, USA
 - 2018: March 11–15, San Diego, USA
- ECIO (European conference on integrated optics), 2015–2017
- ECOC (European Conference on Optical Communications)
 - 2015: September 28–30, 2015, Valencia, Spain
 - 2016: September 18–22, 2016, Düsseldorf, Germany
- Northern Optics
 - 2015: June 2–4, Lappeenranta, Finland,
- Metrologia Symposium
- Photonics North
 - 2015: June 9–11, Ottawa, Canada
 - 2016, May 24–26, Quebec, Canada
 - 2017, Planned for June, Ottawa, Canada

The partners will aim to present at least 10 presentations in national conferences.

Possible conferences include:

- Photonics Finland annual meeting (Finland)
- Finnish Physical Society annual meeting (Finland)
- DPG Tagung (Germany)
- Estonian Physics Days (Estonia)
- National Optics Meeting - RNO (Spain)
- Spanish Opto-electronics Meeting – OPTOEL (Spain)
- Swiss Photonics Workshops (Switzerland)

A5.1.7	Project results will be presented at meetings of standardisation and related organisations. This will be assured by the activities and the memberships of project members in corresponding organisations, e.g.:		CMI, all partners	
	Standards Committee / Technical Committee / Working Group	Partners involved		Likely area of impact / activities undertaken by partners related to standard / committee
	IEC TC86 (Fibre Optics), WG4 (Fibre, Optic Test Equipment Calibrations)	METAS, Seagate		Provide advice for update and improvement of existing standards related to the calibration of measuring instruments used in the fibre optics domain. Jacques Morel (METAS) is a member of IEC TC86 WG4.
	CCPR, WG-SP (Strategic planning) TG6 (fibre optics) and TG9 (OTDR length comparison)	METAS		Provide advice for development or improvement of calibration techniques, within the discussion forum on fibre optics (TG6), and on OTDR Length calibration (TG9). Jacques Morel (METAS) is a member of TG6 and the chair of TG9.
	IEC TC86 (Fibre Optics) / TC91 (Electronics assembly technology) JWG9 (Optical functionality for electronic assemblies)	NPL, Seagate		Provide advice for update and improvement of existing standards and contribution to new standards concerning the functional performance of short range interconnects. IEC TC86/JWG9 (with TC91) was specifically tasked with the standardisation of in-system optical circuit board packaging, including performance and reliability requirements, optical interconnect interfaces, and their test methods. Richard Pitwon (Seagate) is a member of JWG9.
	IEC TC86 (Fibre Optics), TC76 (Optical radiation safety and laser equipment.), AENOR, ENAC	CSIC		Pedro Corredera at CSIC is a member and Spanish delegate in the IEC groups TC86 and TC76. CSIC also has close links to the Spanish Standardisation Body (AENOR) and National Accreditation Body (ENAC), which could contribute to translating the project results into regulations and standards, as well as providing further dissemination.
	EURAMET TC-L	VTT		The project results will be presented and discussed within the TC.
	EURAMET TC-PR	CMI, METAS, CSIC, Aalto		The project results will be presented and discussed within the TC.
	EURAMET TC-TF	VTT, METAS		The project results will be presented and discussed within the TC.
EURAMET TC-EM	NPL	The project results will be presented and discussed within the TC.		

Activity number	Activity description	Partners (Lead in bold)
A5.2.1	At the end of the project a two-day workshop will be held to disseminate the project's results to all the interested industrial and academic parties. The target number of delegates is more than 15. The date and location is to be decided and will most probably in conjunction with a large conference, a meeting or a workshop. The workshop will be funded by a participation fee that covers the costs and will result in no profit or loss for the project.	CMI , all partners
A5.2.2	JCM will train the project partners and other interested parties in the stakeholder community on the use of the JCMsuite program. The training will take place on-site or in conjunction with project meetings.	JCM
A5.2.3	WWU will organise a one day on-site training session on the use of low-temperature techniques for next-generation integration photonic circuitry. The training will also include introductions to the use of broadband single photon detection techniques for fibre optics. The target number of participants is 10.	WWU

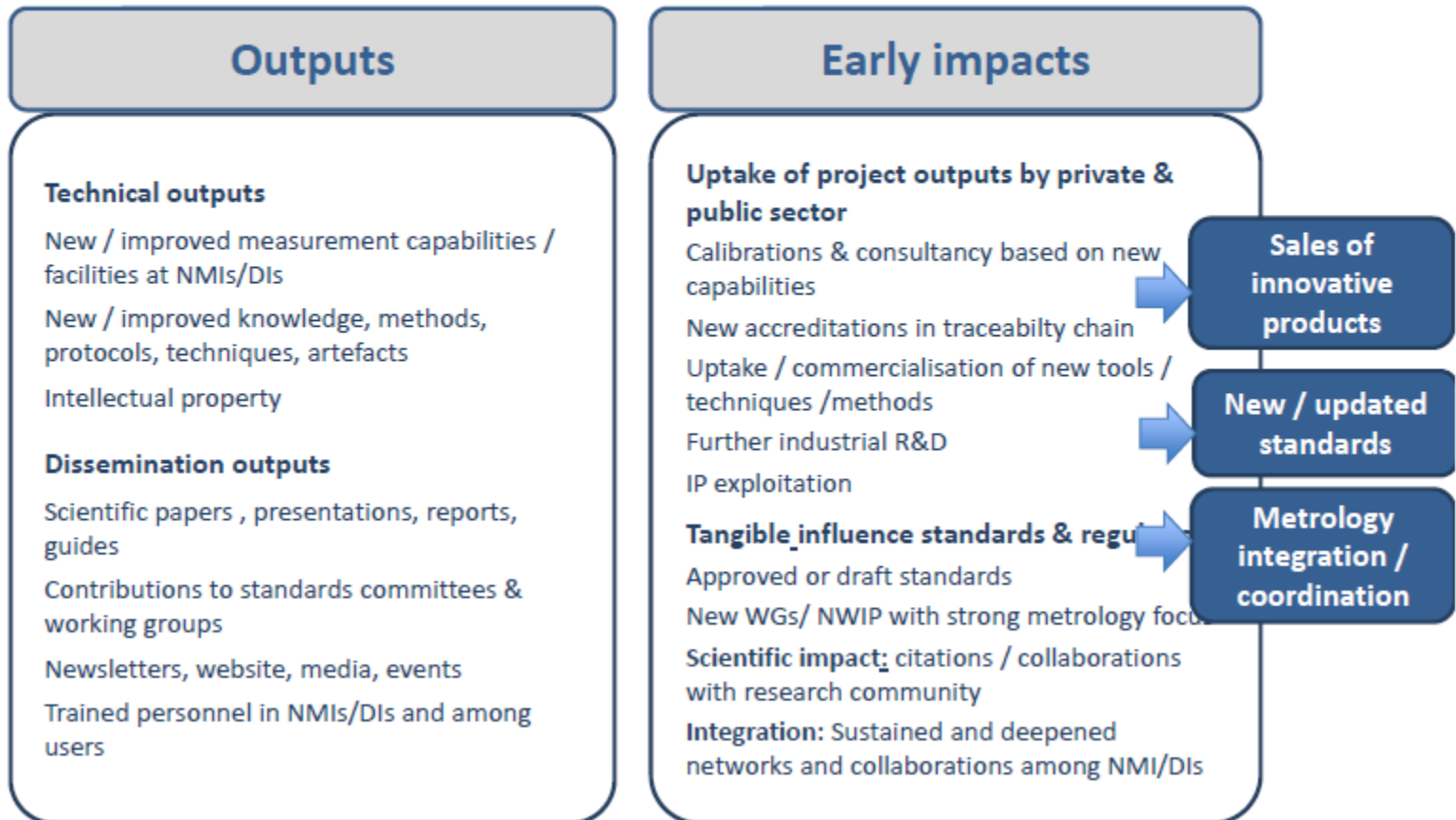
A5.2.4	WWU will organise yearly outreach programme weeks for high school and undergraduate students for recruitment to the fibre optics metrology community. The target is to contact with at least 100 students.	WWU
A5.2.5	<p>The outputs of this project will be also used to create a globally accessible e-learning course with approximately 1 hour of new training content. It will contain video lessons, animations, interactive exercises, and will include an extensive selection of additional publications and materials. In addition, this course will be made available through the NPL Training's Learning Management System (LMS). This will align it with a sequence of existing training materials around metrology, which are designed to progressively bring learners from elementary to advanced levels of knowledge. Moreover, it will also expose the course to a high volume of potential learners, who are accessing the NPL Training web page and LMS on a yearly basis. The course will be made available as a paid product, in line with the other NPL e-Learning training courses, making it a commercially viable solution.</p> <p>This course will be disseminated throughout NPL's network of partners, enabling maximum uptake, outreach and impact.</p>	NPL , all partners

Activity number	Activity description	Partners (Lead in bold)
A5.3.1	A strategy plan for the exploitation of the research related to this project will be created at the beginning of the project and updated at each project meeting as required.	CMI , all partners
A5.3.2	An exploitation plan for the intellectual property developed in this project will be created at the beginning of the project and updated at each project meeting as required.	CMI , all partners
A5.3.3	Intellectual property with potential for industrial exploitation will be scheduled for small-scale start-up funding through the WWU innovation office.	WWU , all partners
A5.3.4	Photonic structures such as light coupling devices, and metrology equipment implementing the developed techniques, will be particularly well suited for protection through patent applications in the European Patent Office. Possible Patent Cooperation Treaty (PCT) extensions of these applications will be considered according to the plan developed in A5.3.2.	CSIC , all partners
A5.3.5	CMI will develop a formal questionnaire to determine the uptake of project outcomes by the photonics industry. This will be distributed to industrial partners, collaborators and the wider stakeholder community via the European Photonics Industry Consortium (EPIC).	CMI
A5.3.6	CMI will review the questionnaire replies and write a report on the successful uptake of project outcomes by the photonics industry, along with recommendations on how to increase the uptake. All partners will review the report. CMI will send it to the coordinator for submission to EURAMET as D9.	CMI , all partners

A5.3.1 Exploitation plan

- Protocol for how best to disseminate and exploit intellectual property generated by the joint research protocol (JRP) partners.
- It is intended that this be a live document that should be updated at each review meeting

Outputs and early impacts



Exploitation strategy

- Stage 1: identify the IP;
 - Patent search, e.g. wipo.org
 - Stage 2: follow the exploitation decision tree (see figure 1 below) to decide how best to exploit the IP;
 - Stage 3: identify the users/readers/market and carry out market research and risk analysis;
 - Stage 4: use dissemination tools available to the project to maximise targeted publicity;
 - Stage 5: evaluate the exploitation and dissemination activities.
-
- Stage 3 is an important point and is related to ‘Is the IP exploitable?’ decision in the exploitation tree below. If the IP should be patented/licenced then the relevant partners need to consider whether the IP meets a significant demand in the market and whether the return will be large enough to cover the cost of patenting/licencing.
-
- Stage 5 will be carried out via a survey to the community at the end of the project, and will be followed-up beyond the lifetime of the project. As part of this activity it would be useful to monitor QKD take-up throughout the course of the project and beyond.