



PROPOSAL FOR TRANSFER TECHNOLOGY FOR THE XLS-XFEL

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THE COMPACT LIGHT XFEL is foreseen for:

Advanced Applications

Nano materials

Metallurgy

Electronics

Chemistry

Biology – Protein structure – DNA radiation
damage

Molecular Crystallography

Super Microscopy

Agriculture, etc.

Intellectual Property Organizations/EU

- Patents
- Licenses – Royalties
- R&D collaborations
- Publications
- KT-partners

Providing Advanced XFEL Components

Photocathode/Laser

RF Gun/Injector

LINAC

Undulator

FEL for S-, X- band photons



Nano materials
Metallurgy
Electronics
Chemistry
Biology – Protein structure – DNA
radiation damage
Molecular Crystallography
Super Microscopy
Agriculture

The **hard X-ray photons** of our XLS collaboration with **0.1 nm** wavelength have the privilege to map:

- ◆ 1. the **atomic structure** of materials (including bio-molecules and nanometer scale structures)
- ◆ 2. **track ultrafast phenomena** of interest with currently available techniques



Photocathode/Laser

RF Gun/Injector

LINAC

Undulator

FEL for S-, X- band photons

- ◆ The cutting edge technology **components** can be fruitfully constructed and distributed to other labs or industrial units
- ◆ The total **design of X-FEL** can also be provided as a compact, short length and less expensive powerful special X-ray source for applications and science



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◆ There many IP agencies :

- ✓ **European Union Intellectual Property Office (EUIPO)**, manages the EU Trade Mark and Design rights, the **Observatory** on Infringements of Intellectual Property Rights and the Orphan Works **Database**
- ✓ **World Intellectual Property organization (WIPO)**, promotes innovation and creativity for the economic, social and cultural development of all countries
- ✓ **European Patent Office (EPO)**, examines and grants European patents under the European Patent Convention



Intellectual property (IP) lies at the heart of **innovation** and **competitiveness** around the world as well as in the European Union.

Intellectual property rights (IPRs) are protected mainly through **patents, trade marks and copyright**.

IPRs enable **individuals** and **companies** to earn recognition and/or financial benefit from what they invent or create.

Taking into account the **right balance** between **innovators** and **public interest**, IP aims to foster an environment in which creativity and innovation can flourish.

The EU has shaped a **framework** that defines and **protects innovations** and **creations** through IP.

This framework mainly comprises of **directives** and **regulations** protecting copyright, trade marks, patents, **designs** and **geographical indications**.



SECTION 3 RIGHTS AND OBLIGATIONS RELATED TO BACKGROUND AND RESULTS

Beneficiaries (Universities/research Organizations) are obliged to take measures to implement the **Code of Practice⁴⁴** annexed to the EU Recommendation on the management of intellectual property in knowledge transfer activities

The Code consists of a set of general principles aiming to improve IP management and knowledge transfer by public research organizations by promoting exploitation and dissemination of research results

Agreement on background :

- ✓ The beneficiaries must identify and agree, in writing, on the background for the action (**'agreement on background'**).
- ✓ **'Background'** means any data, know-how or information — whatever its form or nature (tangible or intangible), including any rights such as intellectual property rights — that:
 1. is held by the beneficiaries before they acceded to the Agreement, and
 2. is needed to implement the action or exploit the results.



Patents

Innovative patents may occur by small **startup teams**

Licenses – Royalties

Licenses are granted to **commercial** and **academic partners** for the exploitation of its technologies

R&D collaborations

The collaboration with **companies** and **research institutes**, have the objective of generating technological results targeting a potential for **commercial exploitation**

Publications

The publications should be carefully **protect the IPs** of our collaboration

KT-partners

Explore to engage **partners** with experts in science, technology and industry



Patents

Innovative patents may occur by small startup teams

Any patent to be submitted should have the consensus of the XLS partners for the total project of the XFEL or parts of it.

Licenses – Royalties

Licenses are granted to commercial and academic partners for the exploitation of its technologies

An important aspect for the XLS collaboration to agree on the policy of license; sharing the IP equivalently among the XLS partners.

R&D collaborations

The collaboration with companies and research institutes, have the objective of generating technological results targeting a potential for commercial exploitation

The R&D collaborations can start by arriving to a mature XFEL design of the project, under the conditions of the Licenses and Patents, described above.



Publications

The publications should be carefully protect the IPs of our collaboration

Any publication to journals or Minutes of Int. Conferences should be approved by the XLS collaboration.

KT-partners

Explore to engage partners with experts in science, technology and industry

KT partners are welcomed for the dissemination of the XLS product(s).

Users Feedback

The users feedback on the XFEL specifications as soon as possible

Market Survey

The market survey needed for establishing a commercial project, requires a certain procedure for participation to industrial and scientific conferences.



A fruitful cooperation of IASA with the Athens University of Economics & Business – AUEB, aims to the following targets:

- Cost/SWOT/Risk Analysis
- Market survey
- Definition of new requirements from the users
- Users forum feedback to our project is needed
- Potential industrialization of our project



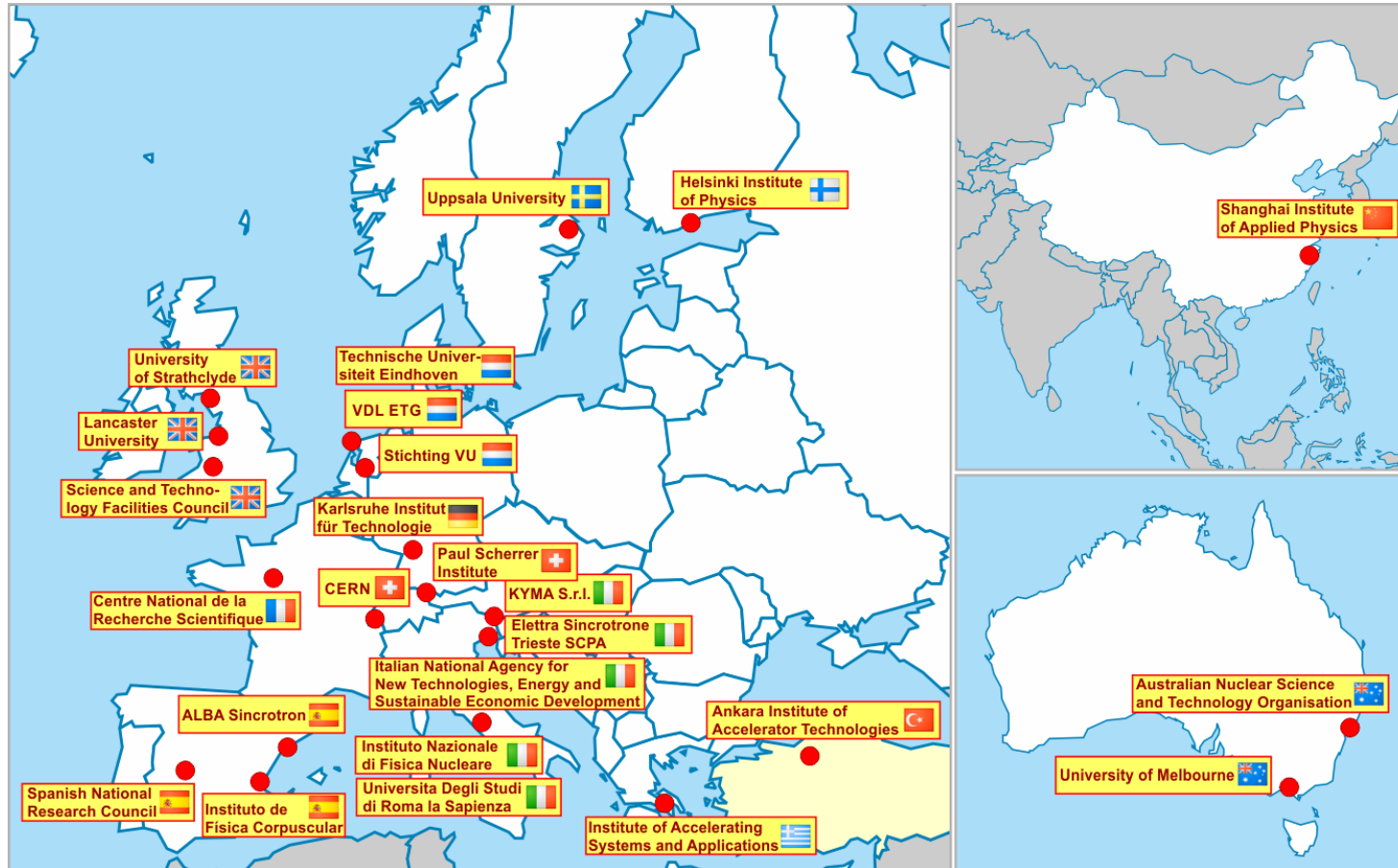
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Compact

Thank you!

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