

Knowledge Transfer at CERN

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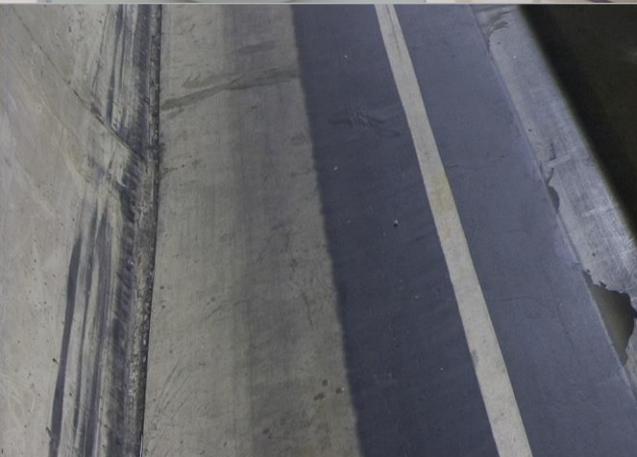
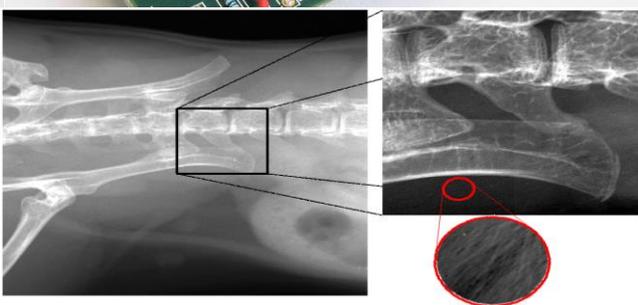
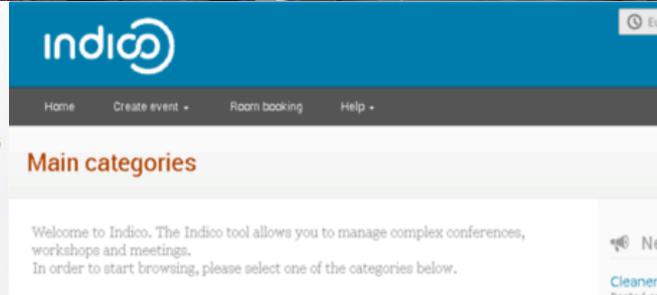
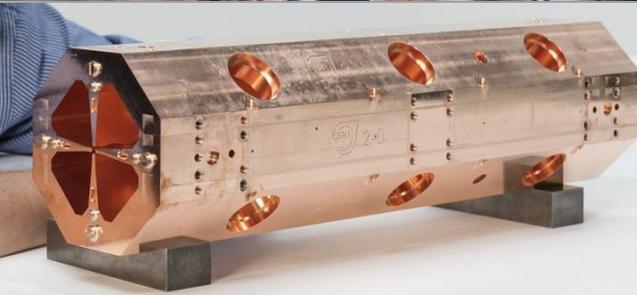
Accelerators



Detectors



Computing



KT Mission

Maximize the technological and knowledge return to Society, specially in the Member States

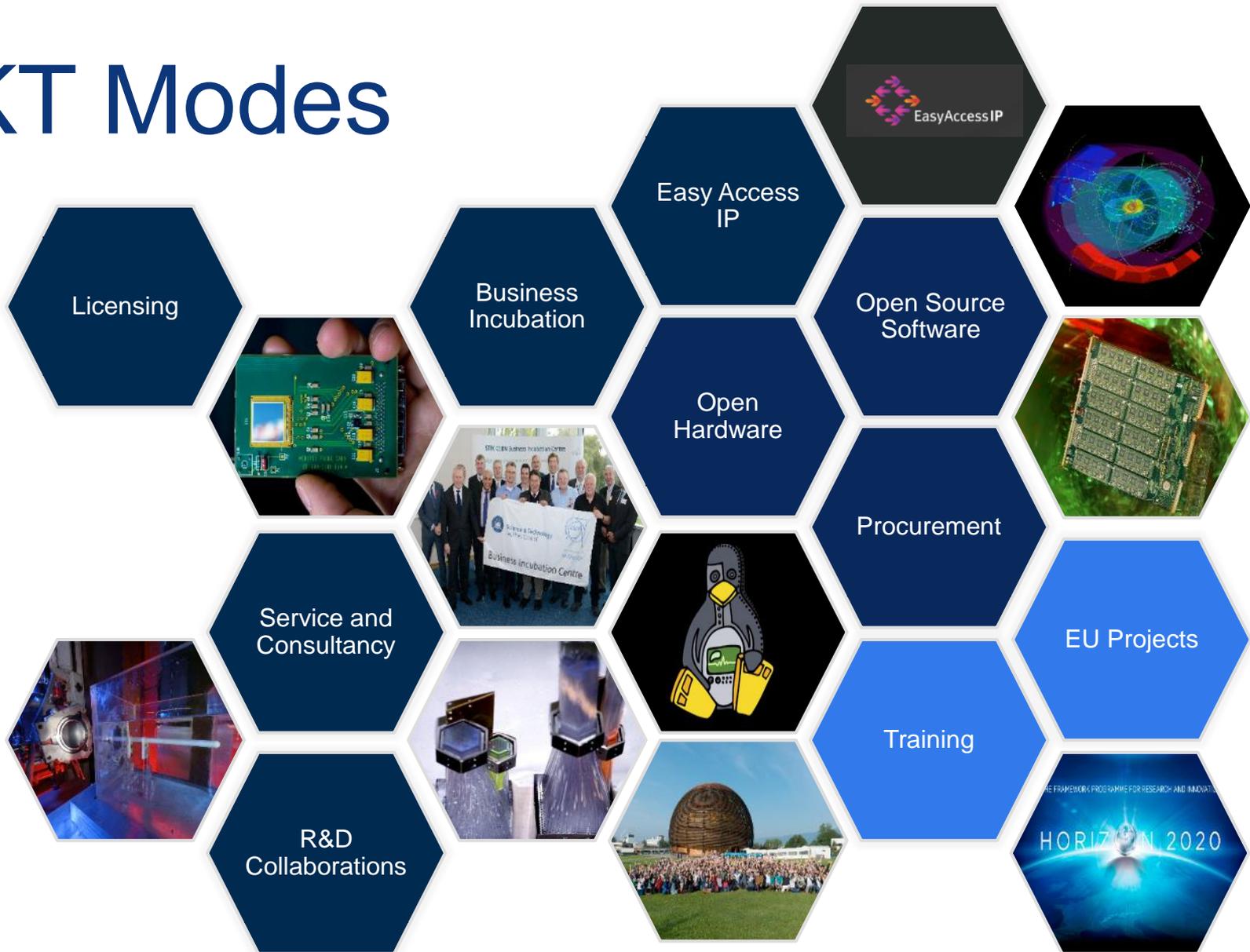
Promote CERN's image as a center of excellence for technology



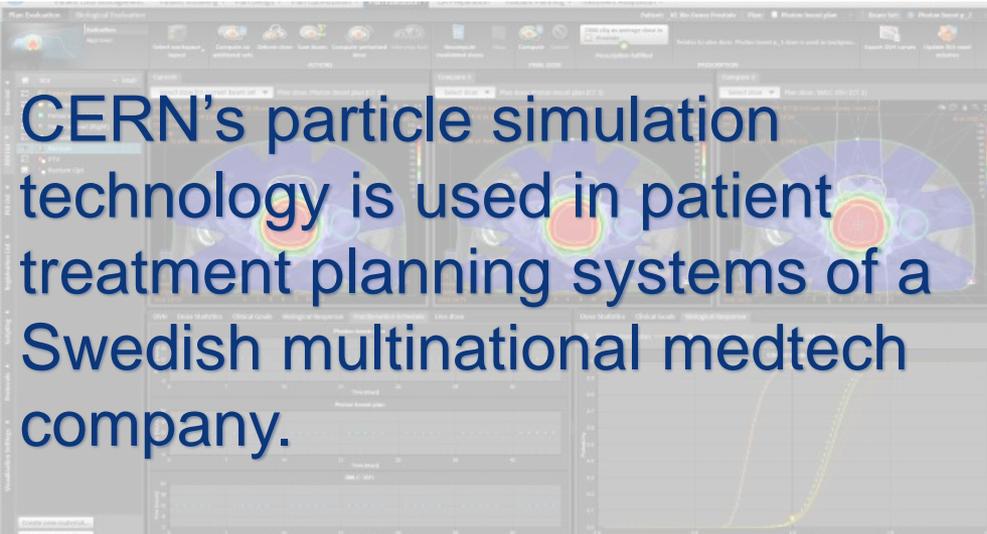
Key words: dissemination and impact!



KT Modes



Examples of transfers 2015



CERN's particle simulation technology is used in patient treatment planning systems of a Swedish multinational medtech company.



CERN's document management software is used by a major university and major international organization, as a commercial service by a CERN spin-off.



CERN's radiation monitoring technology is commercially available in an off-the-shelf product of a young Italian company.



CERN's «miniature accelerator» is being integrated into a commercial proton therapy system by a CERN spin-off.

CERN Core Competences

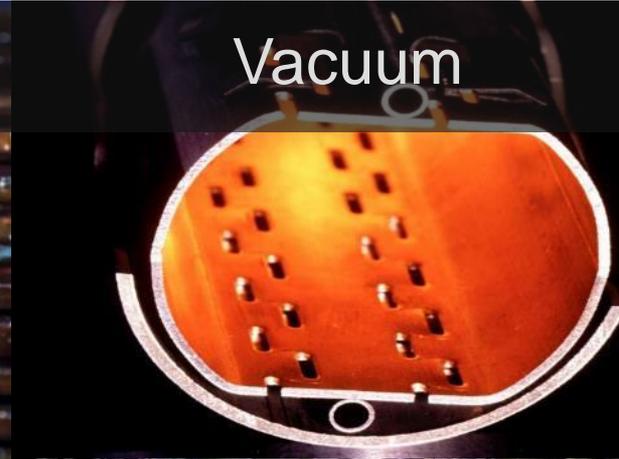
Cryogenics



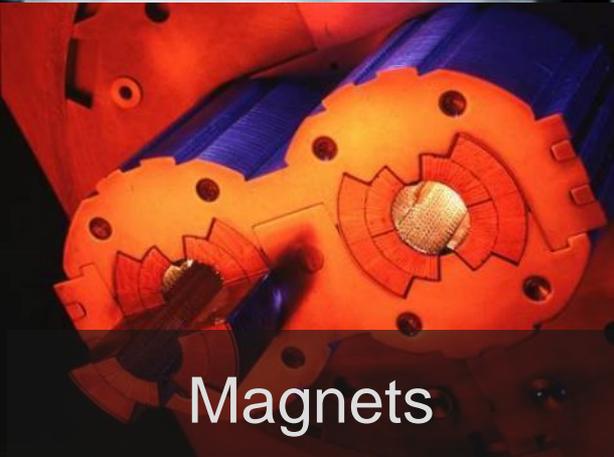
Superconductivity



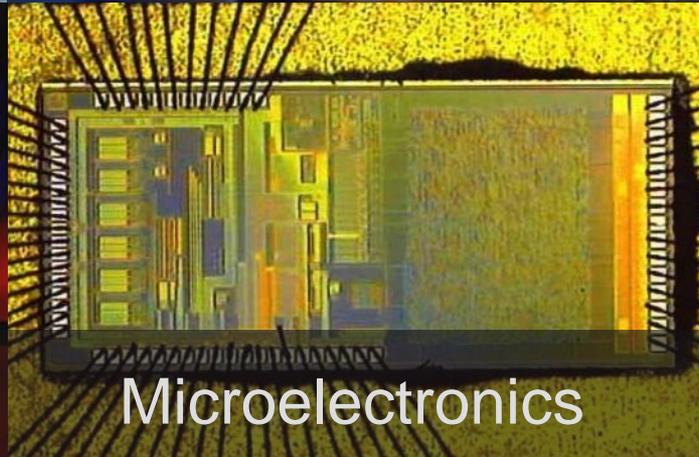
Vacuum



Magnets



Microelectronics



Data Processing



From science to innovation – Topics relevant to power sector

1. CERN technologies
2. Dissemination models
3. Entrepreneurship development



From high vacuum... to solar energy



CERN Technology

Non-Evaporable Getter Coating



Industry (spin-off):

High Efficiency Solar Collectors



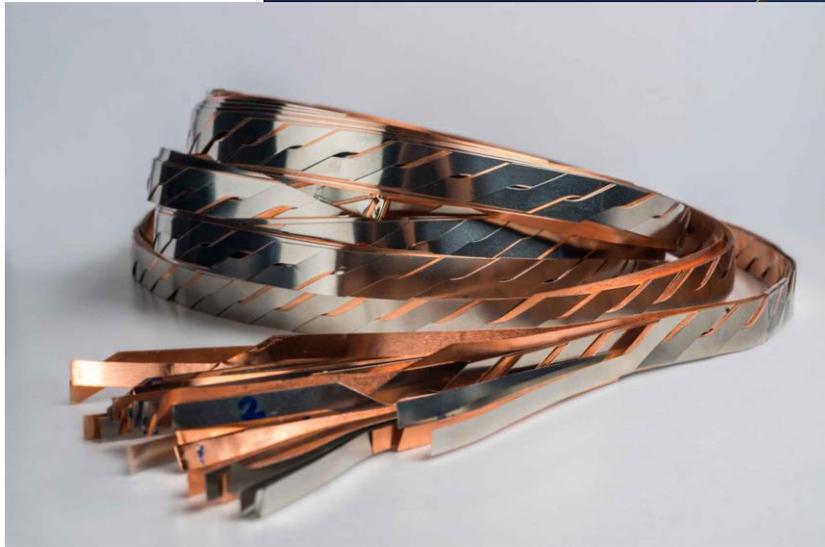
... to off-grid energy generation and storage



Solar Hydrothermal Advanced Reactor Project (SHARP) for Biological Waste Management



Superconductivity



Superconducting cables and HTS



Compact and efficient
cryogenic systems

Dissemination Models

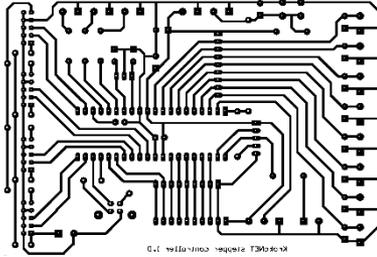
How to ensure widespread access to innovations, in particular for global questions like renewable energy ?

Open Access Publications

Open Source Software

Open Hardware

Open Source Hardware and CERN Open Hardware Licence (OHL)

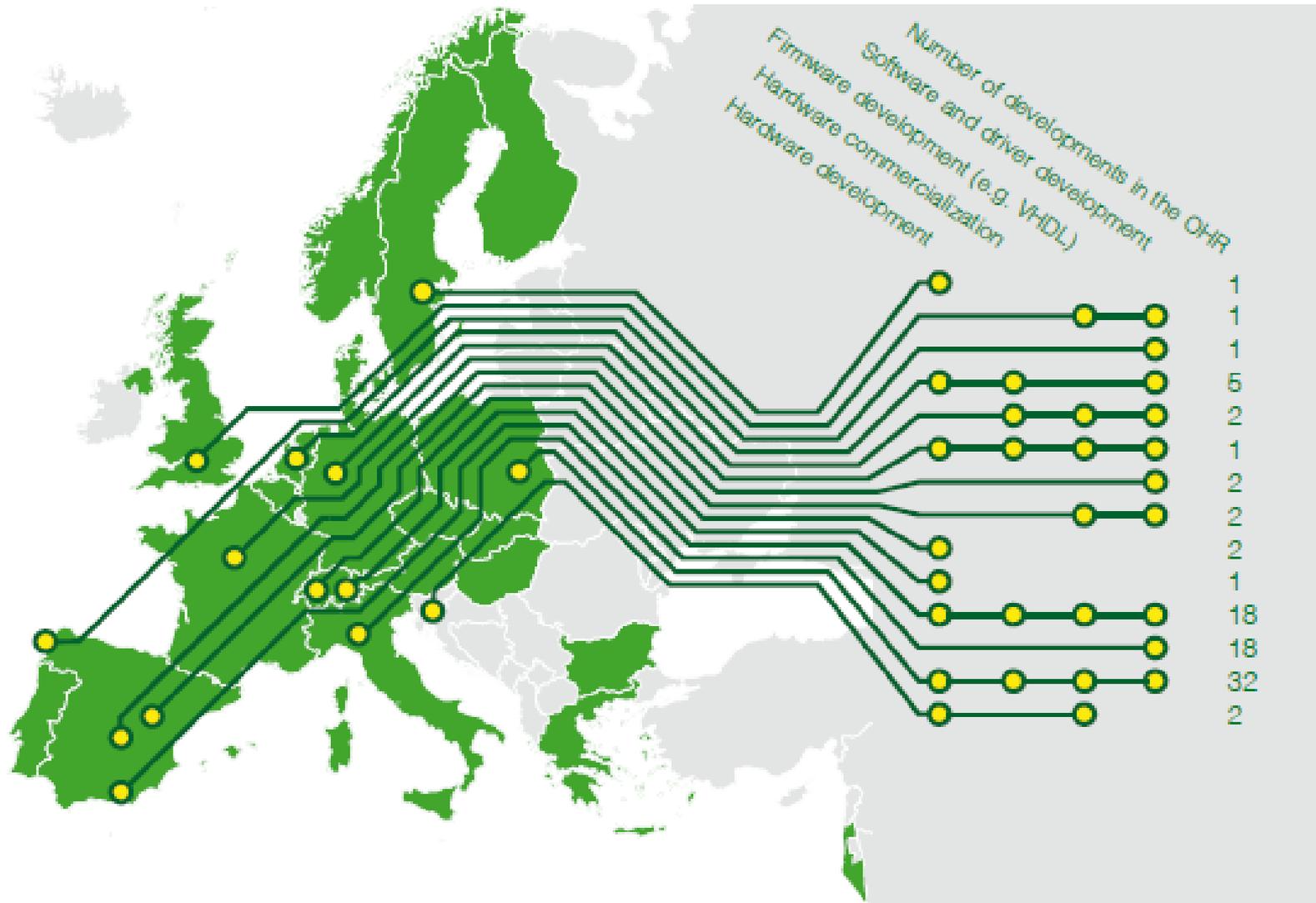


www.ohwr.org

A legal framework to facilitate knowledge exchange across the electronic design community.

Governs the use, copying, modification and distribution of hardware design documentation, and the manufacture and distribution of products.

CERN OHL: it is making an impact!



Entrepreneurship Development



Fostering an Entrepreneurship Culture

Facilitating CERN Spin-Off creation



CERN BIC Network

Established incubators:

UK – STFC-CERN BIC

Netherlands – NIKHEF-CERN BIC

Norway – NTNU BIC of CERN Technology

Greece – Technopolis BIC of CERN Technology

Austria – Austria BIC of CERN Technology

France – InnoGEX BIC of CERN Technology

Finland – Finnish BIC of CERN Technology

Spain – Spanish BIC of CERN Technology

Advanced Pipeline:

Italy





spin-off



technology



supplier



CERN in Society



KT Annual Report 2015

Knowledge Transfer 2015



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