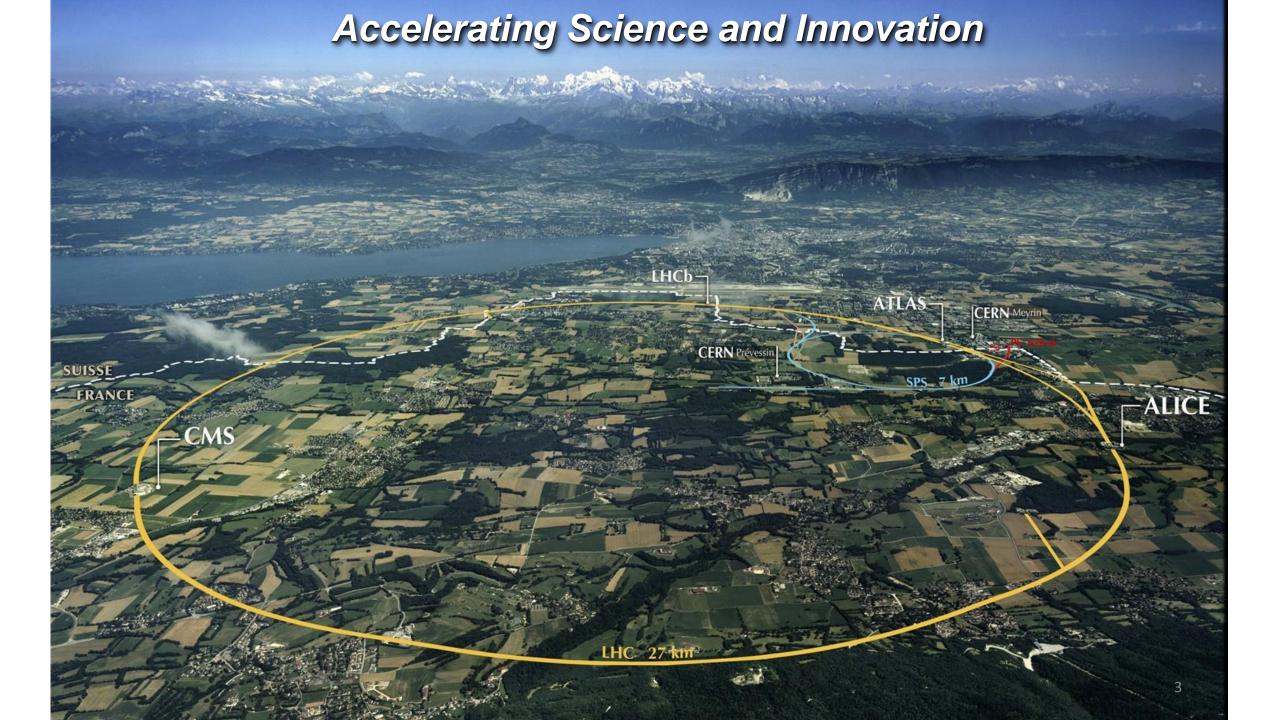
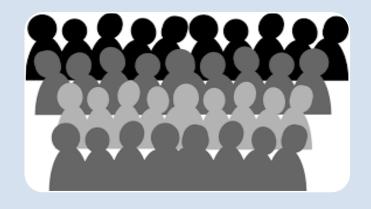


Knowledge Transfer Group, CERN

Content

- CERN
- CERN Knowledge Transfer
- CERN's IP principles
- Conclusion







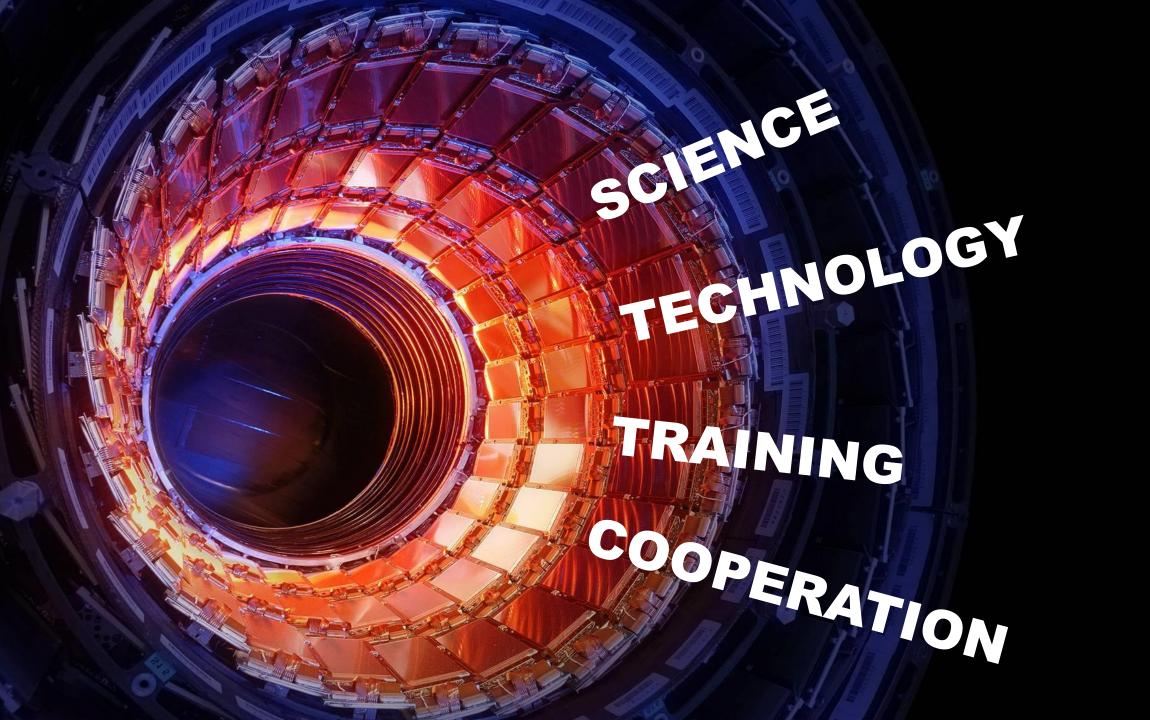


2500 staff
1600 other paid
personnel
12700 scientific
users

Op. Budget =
1000 MCHF (2016)
LHC CERN cost =
4332 MCHF

12 -> 22 Member States

- + Associate MS (2)
- + Accession (2)
- + Applications (7)
- + Observers to Council



The unique legal environment of CERN



Treaty-based scientific IGO



Operational rather than political



Cross-border territory



Biggest and most diverse scientific collaborations

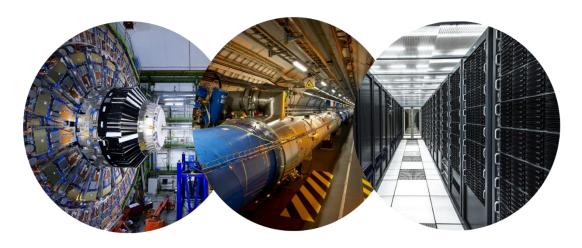


Governing body: CERN Council

Sui generis Organization

 Distinct from corporate world, but also from Academia and PROs & RTOs

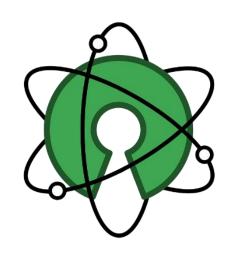
Research infrastructure

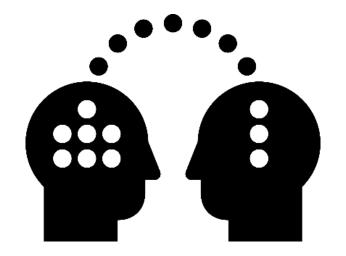


CERN Scientific Environment

Open Science

Open Innovation



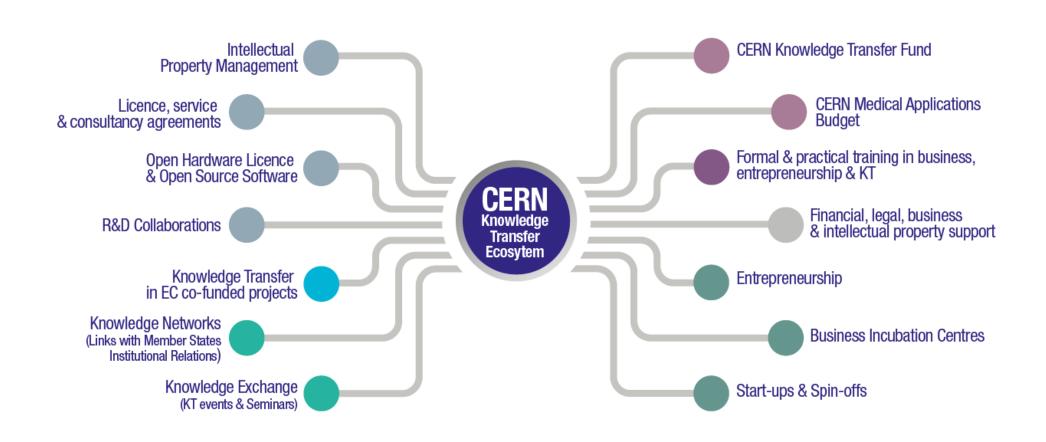


Knowledge Transfer

Mission of the Organization

- Mission of KT:
 - Bring innovation done at CERN outside the borders of particle physics
 - Maximise dissemination and impact
 - Where revenue generated, get a fair share

Accelerating Innovation



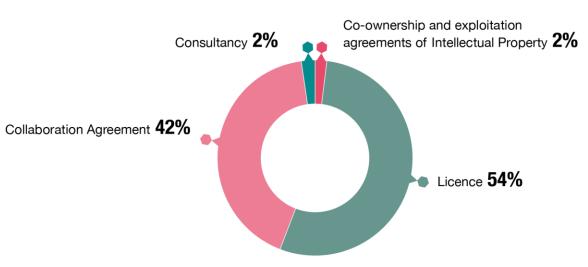
41 KT Contracts signed in 2017



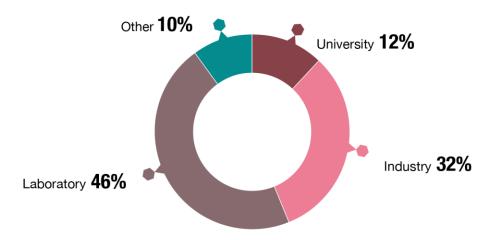
41 KT Contracts in 2017

with industry and external partners





PROPORTION OF CONTRACTS BY PARTNER



Founding principles

IP Policy 2010

"Policy on the management of intellectual property in technology transfer activities at CERN"

1.Use of technology transfer practices that maximise the dissemination and visibility of technologies. In cases where revenue generation and dissemination conflict, the priority is given to dissemination.

2.Use of IP management and technology transfer practices compatible with collaborative and open research.

Founding principles

- 3. Priority given to CERN's scientific programme. In this context, CERN does not normally accept commitment for deadlines, time constraints, volume, or meeting specifications.
- 4. Equal opportunities for industry in all CERN Member States through e.g. wide promotion of available technologies.
- 5. Preference for technology transfer to industry established in CERN Member States.
- 6. Adoption of appropriate measures to avoid that technology transfer to industry impairs the application of the principle of fair competition in future procurements.

Founding principles

- 7. No technology transfer for military applications.
- 8. No competition with industry.
- 9. No commercial role or responsibilities for CERN.

10. CERN normally transfers technologies on an "as-is" basis and does not provide guarantees or accept liability for the use and commercial exploitation of the transferred technologies.

Patent portfolio

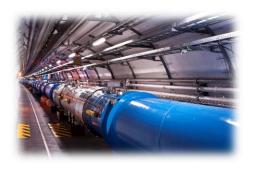
CERN files patents for...

- Dissemination (<u>not</u> protection)
- Investment 'attractiveness' of CERN startups/spin-outs

Every decision taken based on:

- available market information
- number & 'absorptive capacity' of potential licensees
- interests of the patent owners (if co-owned)
- availability/willingness of inventors to facilitate the process
- ... etc

What does our portfolio contain? (2018)



17 'Accelerator' patents

Including: titanium polishing, HF-RFQ, CLIQ, superconducting tapes, cryogenic sensors, etc.



17 'Detector' patents

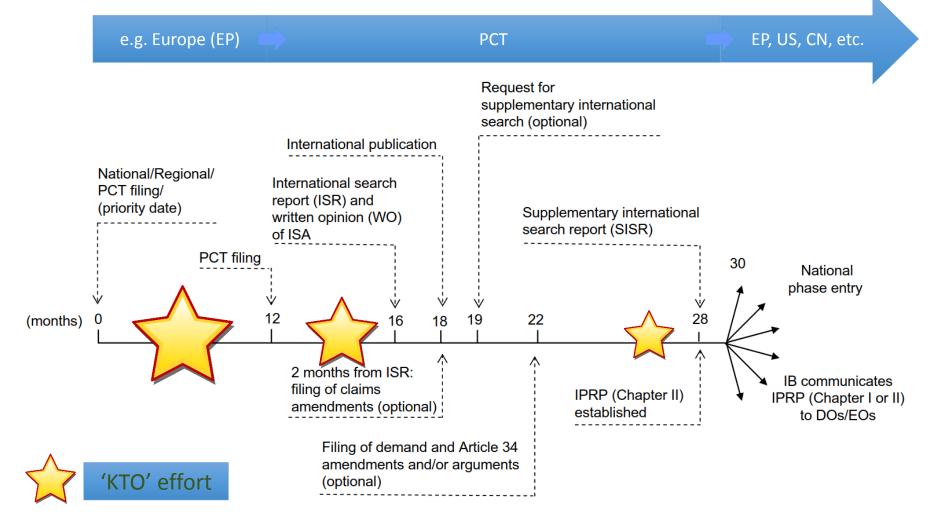
Including: GEM, device for operation in intense magnetic fields, Autopics, etc.



0 'Computing' patents

CERN POLICY ON SOFTWARE DISSEMINATION
"we do not recommend the use of software patents at CERN"

Typical filing route @ CERN



Pricing

- Fair share of revenue generated from commercialization
- Coverage of costs + overhead
- Favourable conditions for non-commercial and start-ups
- Internal redistribution
 - Team
 - Department
 - KT fund

CERN Knowledge Transfer Fund



2 new projects awarded grants in 2017



Since 2011, 41 projects were funded



Each project receives 15-220kCHF



~ 6 projects / year

Summary

- Dissemination
- Fair and equitable principles
- No commercial role
- Future procurements