

REPORT FROM CERN INTERNATIONAL RELATIONS

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Joint CERN-KEK Committee
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Science for Peace

CERN was founded in 1954 with 12 European Member States



23 Member States

Austria – Belgium – Bulgaria – Czech Republic
Denmark – Finland – France – Germany – Greece
Hungary – Israel – Italy – Netherlands – Norway
Poland – Portugal – Romania – Serbia – Slovakia
Spain – Sweden – Switzerland – United Kingdom

3 Associates Member States in the pre-stage to membership

Cyprus – Estonia – Slovenia

7 Associate Member States

Croatia – India – Latvia – Lithuania – Pakistan
Turkey – Ukraine

6 Observers

Japan – Russia – USA
European Union – JINR – UNESCO

More than 50 Cooperation Agreements with non-Member States and Territories

Albania – Algeria – Argentina – Armenia – Australia – Azerbaijan – Bangladesh – Belarus – Bolivia
Bosnia and Herzegovina – Brazil – Canada – Chile – Colombia – Costa Rica – Ecuador – Egypt – Georgia – Iceland
Iran – Jordan – Kazakhstan – Lebanon – Malta – Mexico – Mongolia – Montenegro – Morocco – Nepal
New Zealand – North Macedonia – Palestine – Paraguay – People's Republic of China – Peru – Philippines – Qatar
Republic of Korea – Saudi Arabia – Sri Lanka – South Africa – Thailand – Tunisia – United Arab Emirates – Vietnam

CERN's annual budget
is 1200 MCHF (equivalent
to a medium-sized European
university)

As of 31 December 2020
Employees:
2635 staff, **756** fellows

Associates:
11 399 users, **1687** others

A Laboratory for People from around the World

Distribution of all **CERN Users** by the country of their **home institutes** as of **31 December 2020**



Geographical & cultural diversity
Users of **110 nationalities**
~ **23% women**

Member States **6632**

Austria 82 – Belgium 122 – Bulgaria 37 – Czech Republic 221
Denmark 35 – Finland 79 – France 794 – Germany 1185
Greece 138 – Hungary 67 – Israel 63 – Italy 1388
Netherlands 166 – Norway 78 – Poland 272 – Portugal 80
Romania 99 – Serbia 35 – Slovakia 66 – Spain 325
Sweden 96 – Switzerland 329 – United Kingdom 875

Associate Member States **27**

in the pre-stage to membership

Cyprus 11 – Slovenia 16

Associate Member States **390**

Croatia 38 – India 151 – Lithuania 13 – Pakistan 35
Turkey 124 – Ukraine 29

Observers **3071**

Japan 211 – Russia 1021 – United States of America 1839



Other countries **1279**

Algeria 2 – Argentina 15 – Armenia 10 – Australia 23 – Azerbaijan 2 – Bahrain 2 – Belarus 26 – Brazil 108
Canada 196 – Chile 22 – Colombia 15 – Cuba 3 – Ecuador 4 – Egypt 14 – Estonia 26 – Georgia 35
Hong Kong 20 – Iceland 3 – Indonesia 7 – Iran 13 – Ireland 6 Kuwait 2 – Latvia 6 – Lebanon 17
Malaysia 4 – Malta 3 – Mexico 49 – Montenegro 5 – Morocco 18 – New Zealand 11 – Oman 1
People's Republic of China 334 – Peru 2 – Puerto Rico 2 – Republic of Korea 132 – Singapore 3
South Africa 57 – Sri Lanka 8 – Taiwan 50 Thailand 16 – United Arab Emirates 2

Membership

Estonia

- On 19 June 2020 the DG and the Prime Minister of Estonia **signed an agreement** admitting Estonia as an Associate Member State in the pre-stage to Membership.
- The agreement entered into force on **1 February 2021**.
- Expect Estonia to accede to Membership in about **two years** (minimum period stipulated by CERN's geographical enlargement policy).



On the occasion of the notification of Associate Membership to CERN, the **Estonian Permanent Representative** Ms Katrin Saarsalu-Layachi visited CERN on **1 February 2021**.

Associate Membership

Latvia

- **Associate Membership Agreement** signed on **14 April 2021**.
- Associate Membership **entered into force on 2 August 2021** once CERN was informed officially that all the necessary accession and ratification processes were completed by Latvia.

Brazil

- **Council passed Resolution on 24 September 2021** for the admission of Brazil as an Associate Member of CERN.
- Signature of agreement and the necessary accession & ratification processes in Brazil to follow.

Egypt expressed interest in CERN Associate Membership.



Dr Anita Muižniece, **Minister for Education and Science of Latvia** (attending remotely) and Mr Bahtijors Hasans, **Permanent Representative of Latvia** (at CERN) on the occasion of the notification of the Associate Membership to CERN on **2 August 2021**.

International Cooperation Agreements (ICAs)

Bosnia & Herzegovina

- **ICA signed** with Bosnia & Herzegovina concerning scientific and technical cooperation in high-energy physics on **16 February 2021**.

Bahrain, Honduras, Sudan

ICAs are under consideration.

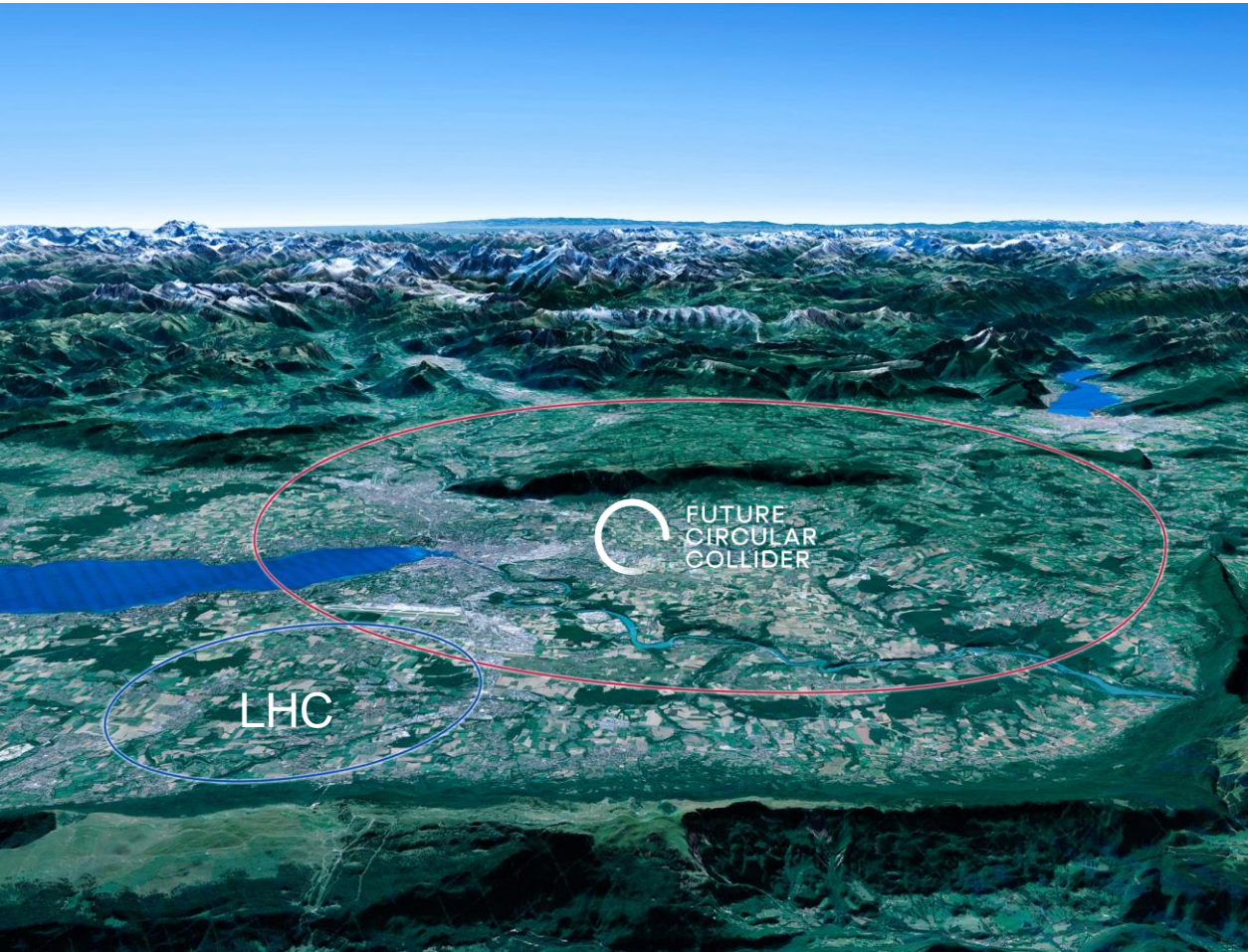


HE Ankica Gudeljević, **Minister of Civil Affairs** of Bosnia and Herzegovina, signed the ICA

Scientific Priorities for the Future

Implementation of the recommendations of the **2020 Update of the European Strategy for Particle Physics**:

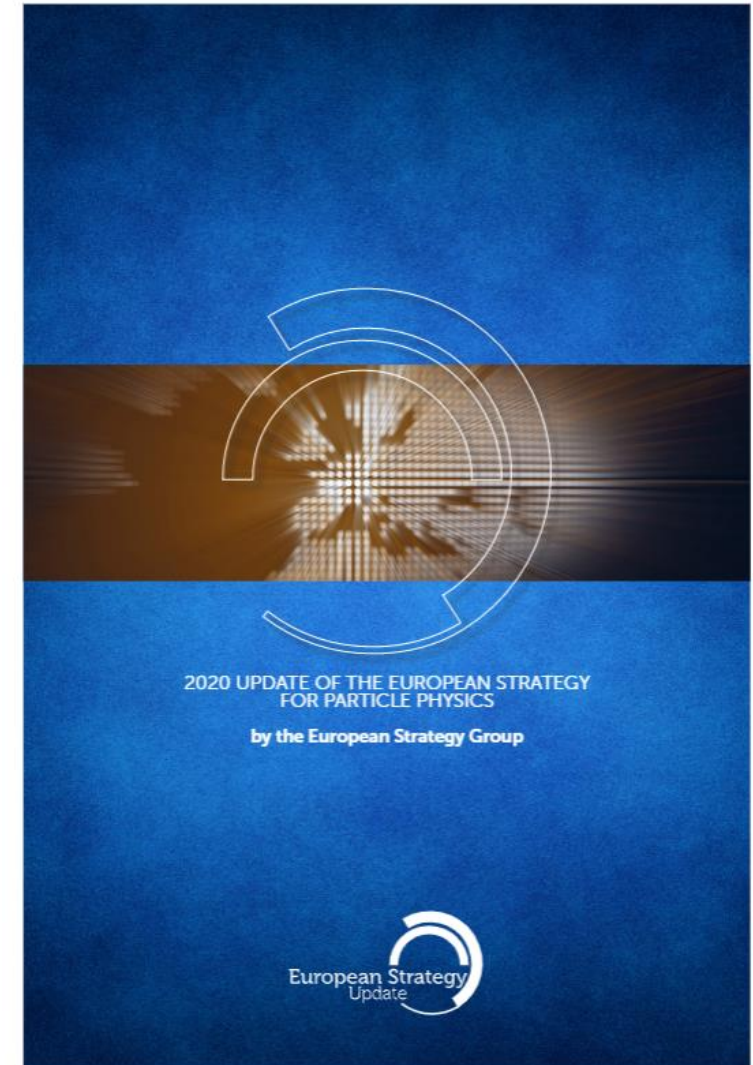
- Fully exploit the **HL-LHC**.
- Build a **Higgs factory** to further understand this unique particle.
- Investigate the technical and financial feasibility of a future **energy-frontier 100 km collider at CERN**.
- Ramp up relevant **R&D**.
- Continue supporting other **projects around the world**.



FCC Feasibility Study (FS) will address a recommendation of the 2020 update of the European Strategy for Particle Physics (ESPP):

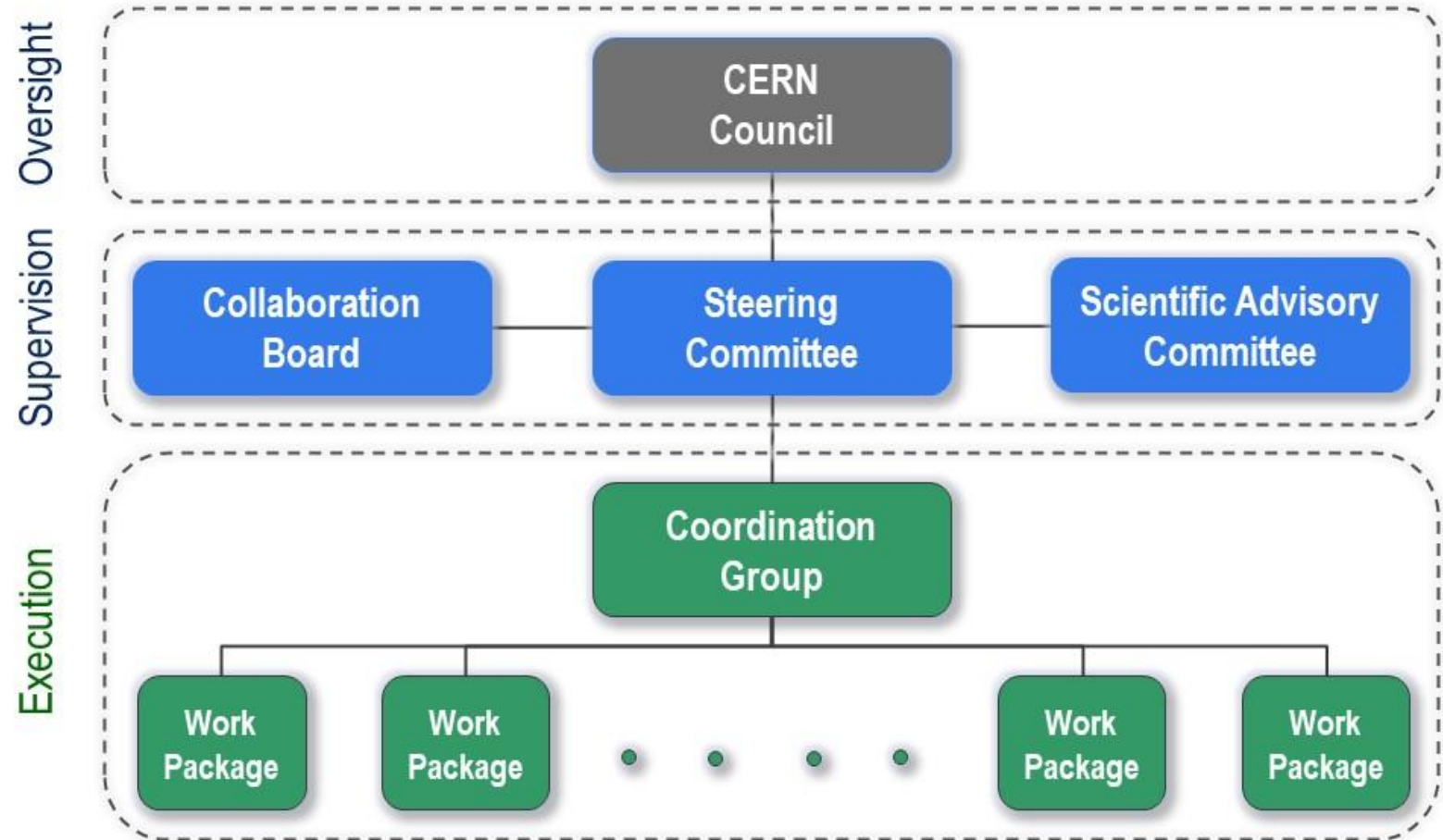
- “Europe, together with its international partners, should investigate the **technical and financial feasibility** of a future hadron collider at CERN with a centre-of-mass energy of at least 100 TeV and with an electron-positron Higgs and electroweak factory as a possible first stage.
- Such a feasibility study of the colliders and related infrastructure should be established as a **global endeavour** and be completed on the timescale of the next Strategy update.”

→ Complete Feasibility Study Report by end 2025



FCC Organisational Structure

- **Ownership** of the Feasibility Study by the Council.
- Effective and timely **supervision**.
- Integration of scientific and technical **advice**.
- **Participation of stakeholders** that can potentially make significant financial and technical contributions to a possible future project.
- **Execution** of Feasibility Study.



FCC Global Collaboration

increasing international collaboration
as a prerequisite for success



34

Countries



30

Companies

147

Institutes

93 member states
16 associate member states
21 non-member states with observer status
17 other non-member states

From ESPP 2020: “Such a feasibility study of the colliders and related infrastructure should be established as a **global endeavour....**”

→ FCC Global Collaboration Working Group active since spring 2021

- Engage with institutes/countries/regions with **mature communities**, and the **potential to contribute substantially** to the Organization’s long-term scientific objectives, to facilitate participation in FCC FS.
- Work with national laboratories, institutes, universities and industry in MS, AMS, Observer States and NMS to:
 - Encourage an **expanded membership** and explore **opportunities** for future prospective participants.
 - Explore **opportunities** for future prospective participants in defining **areas of collaboration**.
 - Prepare the foundations for research and contributions by **industry**.
 - Liaise with **national contact persons** and **forums**.

lets**COLLABORATE!**



