



Report from CERN Council

Klaus Desch (University of Bonn)
KET Jahrestagung, Bad Honnef 24/11/2023

CERN's member states

<https://home.cern/about/who-we-are/our-governance/member-states>

23 Member states

Austria
Belgium
Bulgaria
Czech Republic
Denmark
Finland
France
Germany
Greece
Hungary
Israel
Italy
Netherlands
Norway
Poland
Portugal

Romania
Serbia
Slovak Republic
Spain
Sweden
Switzerland
United Kingdom

Delegates:

Dr. Volkmar Dietz
K.D.

Finance Committee:

Dr. Friederike Trimmborn-
Witthaut
Dr. Martin Thomé

Associate Member states

In the pre-stage to Membership:

Cyprus
Estonia
Slovenia

„Normal“ associate member states: (pay 10% of full fee)

Croatia
India
Latvia
Lithuania
Pakistan
Turkey
Ukraine
Brazil (awaiting ratification)

Observers

w.r.t. LHC:

Japan

~~Russian Federation~~

United States of America

w.r.t. HL-LHC:

United States of America

International organisations:

European Union

~~JNR~~

UNESCO

New in 2023:

Application for Associate Membership:
Ireland, Chile

CERN's budget

		2023 Annual contribution	2023 Annual contribution	2023 Annual contribution acc. to the corridor principle (**)
Member States	Country	in CHF 2022 prices	in %	in CHF 2023 prices
	Austria	26 028 850	2.21617%	26 549 450
Belgium	32 552 500	2.77161%	33 203 550	
Bulgaria	4 153 950	0.35368%	4 237 050	
Czech Republic	13 702 850	1.16670%	13 976 900	
Denmark	21 597 600	1.83888%	22 029 550	
Finland	15 829 150	1.34774%	16 145 750	
France	158 630 000	13.50620%	161 802 600	
Germany	246 920 000	21.02346%	251 858 400	
Greece	11 654 550	0.99230%	11 887 650	
Hungary	8 649 100	0.73641%	8 822 100	
Israel	24 653 900	2.09910%	25 147 000	
Italy	118 609 000	10.09870%	120 981 200	
Netherlands	56 383 650	4.80066%	57 511 300	
Norway	25 257 550	2.15050%	25 762 700	
Poland	36 089 150	3.07273%	36 810 950	
Portugal	13 070 050	1.11282%	13 331 450	
Romania	14 997 300	1.27691%	15 297 250	
Serbia	3 146 950	0.26794%	3 209 900	
Slovakia	6 249 850	0.53213%	6 374 850	
Spain	85 275 100	7.26056%	86 980 600	
Sweden	30 043 900	2.55802%	30 644 800	
Switzerland	44 526 500	3.79111%	45 417 050	
United Kingdom	176 476 150	15.02567%	180 005 650	
Total Member States		1 174 497 600	100.0000%	1 197 987 700

		2023 Annual contribution	2023 Annual contribution	2023 Annual contribution acc. to the corridor principle (**)
Associate Member States in the pre-stage to Membership	Cyprus	1 053 300		1 074 350
	Estonia	1 336 950		1 363 650
	Slovenia	2 164 150		2 207 400
Total Associate Member States in the pre-stage to Membership		4 554 400		4 645 400
Associate Member States	Croatia	1 000 000		1 000 000
	India	16 608 350		16 940 500
	Latvia	1 024 850		1 045 350
	Lithuania	1 000 000		1 000 000
	Pakistan	2 003 450		2 043 550
	Türkiye	4 626 800		4 719 350
Ukraine	1 000 000		1 000 000	
Total Associate Member States		27 263 450		27 748 750
Grand TOTAL		1 206 315 450		1 230 381 850

CERN's governance

<https://home.cern/about/who-we-are/our-governance>

The CERN Council is the highest authority of the Organization and has responsibility for all-important decisions. It controls CERN's activities in scientific, technical and administrative matters. It approves programmes of activity, adopts the budgets and reviews expenditure.

President of Council:



Eliezer Rabinovici (IL)
2022-

Vice presidents:



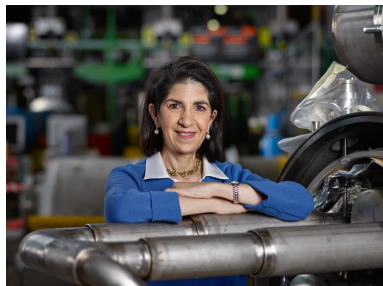
Costas Foudas (GR)
2022-



Eric Laenen (NL)
2022-

The Director-General, appointed by the Council, manages the CERN Laboratory. The Director-General is assisted by a directorate and runs the Laboratory through a structure of departments.

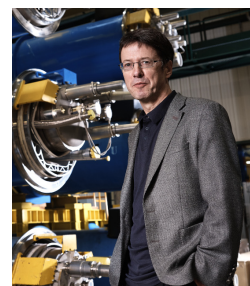
Directorate 2021-2025:



Fabiola Gianotti
Director General



Joachim Mnich
Research and Computing



Mike Lamont
Accelerators and Technology



Raphaël Bello
Finance and Human Resources



Charlotte Warakaulle
International Relations

Council Committees

Scientific Policy Committee (SPC)



Hugh „Mont“ Montgomery
Chair

Ex-Officio Members

Prof. Karl Jakobs	Chair ECFA
Prof. Jordan Nash	Chair SPSC
Prof. Andrew Parker	Chair FCC SA
Prof. Marek Pfützner	Chair INTC
Prof. Mike Seidel	Chair MAC
Prof. Frank Simon	Chair LHCC

Members

Prof. Hiroaki Aihara	University of Tokyo, Japan
Prof. Klaus Blaum	Max Planck Institute for Nuclear Physics, Germany
Prof. Philip Burrows	University of Oxford, United Kingdom
Prof. Robert Cousins	University of California, Los Angeles (UCLA), USA
Prof. Nigel Glover	Durham University, United Kingdom
Prof. Pilar Hernandez	IFIC, University of Valencia, Spain
Prof. Gino Isidori	University of Zürich, Switzerland
Prof. Marumi Kado	Max Planck Institute for Physics, Germany
Prof. Mats Lindroos	ESS and Lund University, Sweden
Prof. Fabio Maltoni	University of Bologna (IT) and Université catholique de Louvain (BE)
Prof. Jocelyn Monroe	Royal Holloway, University of London, UK
Prof. Kate Scholberg	Duke University, Durham, NC, USA
Prof. Marie-Hélène Schune	Laboratoire de Physique des 2 infinis Irène Joliot-Curie (IJCLab), Orsay, France
Prof. Johannes Peter Wessels	Westfälische Wilhelms-Universität Münster, Germany
Prof. Akira Yamamoto	KEK, Japan and CERN

Council Committees

Finance Committee (FC)



Laurent Salzarulo (CH)
Chair

Members

Austria	Mr Florian Brandt Mr Christoph Wieland
Belgium	Dr Ir. Véronique Halloin Prof. Dirk Ryckbosch
Bulgaria	Ms Sonia Krastanova Ms Zornitsa Todorova
Czech Republic	Ms Kristýna Lexa Sedláková Mr Ondřej Novák
Denmark	Mr Bjarke Stoltze Kaspersen Mr René Michelsen
Finland	Mr Pietari Kauttu Mr Ossi Malmberg
France	Ms Carine Bernard Ms Nathalie Prentout
Germany	Dr Martin Thomé Dr Friederike Trimborn-Witthaut

Greece	Prof. Konstantinos Fountas
Hungary	Ms Györgyi Juhasz
Israel	Mr Neri Azogui Ms Avital Blajwas
Italy	Prof. Cristina Biino Ms Veronica Buccheri
Netherlands	Prof. Eric Laenen Mr Elmar van Holten
Norway	Dr Liv Furuberg Prof. Eivind Osnes
Poland	Dr Dariusz Drewniak
Portugal	Ms Filipa Coelho
Romania	Dr Florin Buzatu Ms Anca Ghinescu
Serbia	Mr Miroslav Zotović
Slovakia	Mr Robert Ševčík
Spain	Ms Guadalupe De Córdoba Ms Carmen Gómez Sánchez
Sweden	Prof. Barbro Åsman Dr Mathias Hamberg (Vice-Chair)
Switzerland	Ms Mélanie Golliard Dr Doris Wohlfender-Bühler
United-Kingdom	Ms Jessica Atkinson Ms Sarah Verth

Associate Member States in the pre-stage to Membership

Cyprus	Prof. Panos Razis
Estonia	Mr Robert Aare
Slovenia	Dr Romana Jordan

Associate Member States

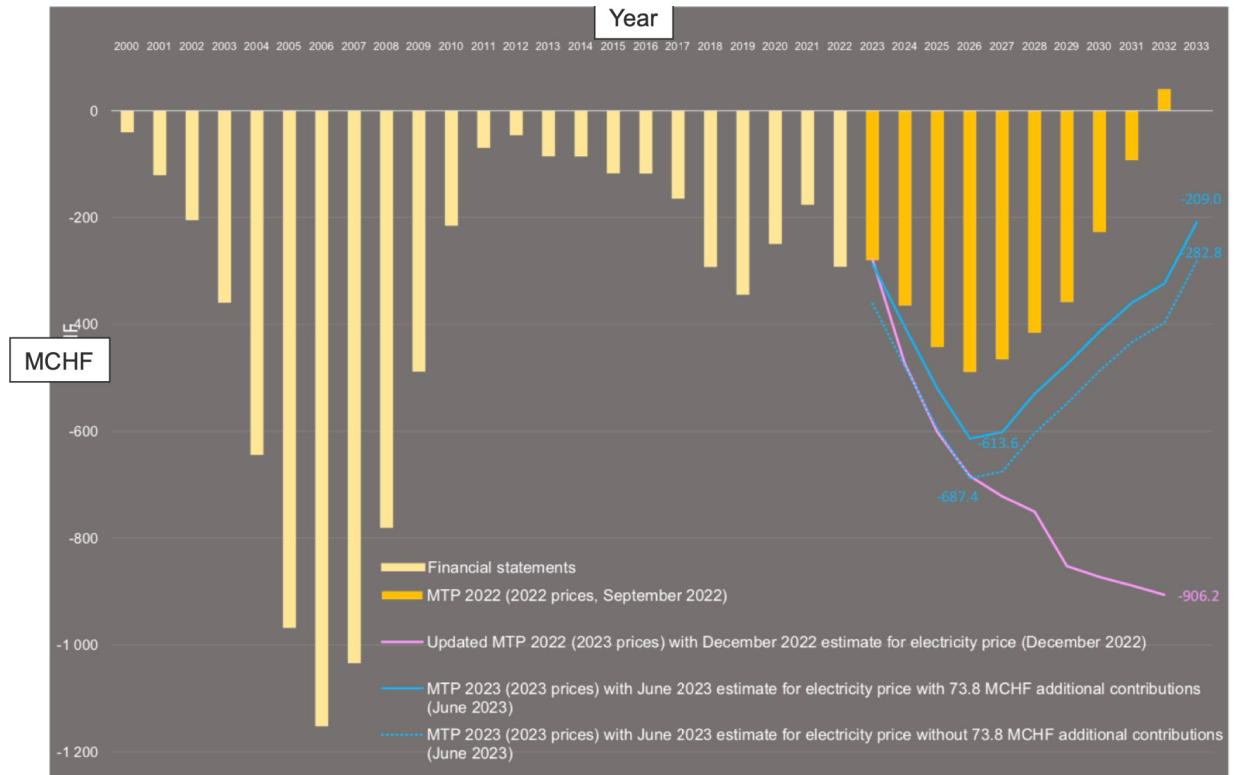
Croatia	Ms Doris Jozić Professor Mirko Planinić
India	Mr Sunil Ganju
Latvia	Ms Diāna Laipniece Ms Alise Pīka-Ozola
Lithuania	Dr Andrius Juodagalvis
Pakistan	Mr Zafar Yasin
Türkiye	Mr Ali Kemal Anacik Mr Hakan Kiziltoprak
Ukraine	Prof. Borys Grynyov Dr Anatolii Zagorodniy

Russian aggression against Ukraine: consequences

- Ongoing effort to find new affiliations for remaining MPAs from Russia (mainly those who cannot go back to their home without severe problems) → task force
- Council's intention to terminate ICAs with Russia and Belarus unchanged
RUS: expiration Dec 24 → latest decision in Mar 24
BLR: expiration Jun 24 → latest decision in Dec 23
plan (likely) to terminate both in Dec 23 council session
- JINR: "Council **intends to review** CERN's future participation under the International Cooperation Agreement concluded between CERN and JINR" (expiration of ICA Jan 25)
→ "review" will happen in 2024
- Publication policy agreed upon by the four large experiments ATLAS, CMS, LHCb, ALICE (was a tedious process)
- Council waived again (associated) membership fee to Ukraine for 2023 (extra contribution from MS)

Energy/Financial crisis

- Inflation, in particular increased (factual and projected) costs for energy were leading to severely negative projection for CERN budget evolution “CBD – cumulative budget deficit”
- Council (MS), Management and Personell agreed on package to mitigate the situation:
 1. Management introduced savings (main action: 2/4/4/4 weeks longer YETS 22/23/24/25 smaller savings/cuts on other items)
 2. Member states agreed on 73.8 MCHF one-time additional contribution
 3. Personell contributed by “crisis levy” 7.8 M€



FCC feasibility study

European Strategy: 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.**

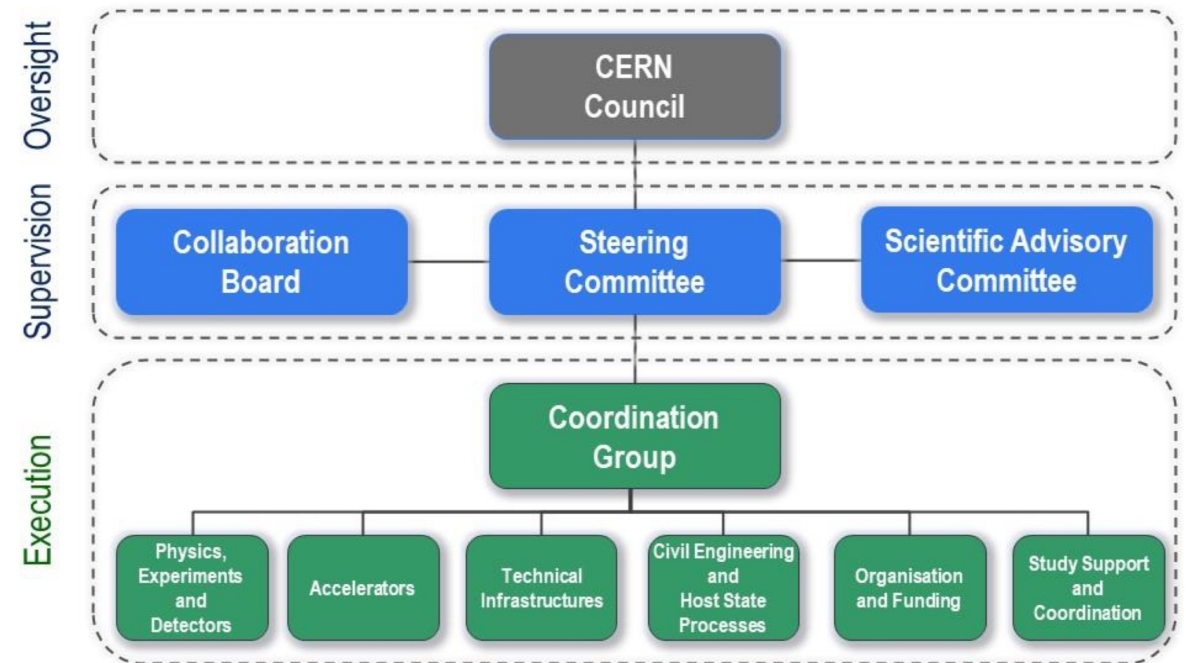
FCC feasibility study launched (budget 100 MCHF, 5 years)

Structure unanimously approved by CERN Council in June 2021

Ownership by CERN Council

Representatives of the worldwide FCC community

Participation of external stakeholders envisaging to make significant financial contributions to possible future project



FCC feasibility study

FCC study group has presented its Midterm report (~800 pages) to FC/SPC last week, will be presented to Council in a dedicated Council meeting in Feb 2024

Deliverables for Midterm report (requested by Council):

- 1 Definition of placement scenario
- 2 Civil Engineering
- 3 Implementation with the Host States
- 4 Updated Requirements for the main technical infrastructure
- 5 FCC-ee Collider Design and Performance
- 6 FCC-hh collider design and performance
- 7 Project cost and financial feasibility
- 8 Physics & Experiments

KD:

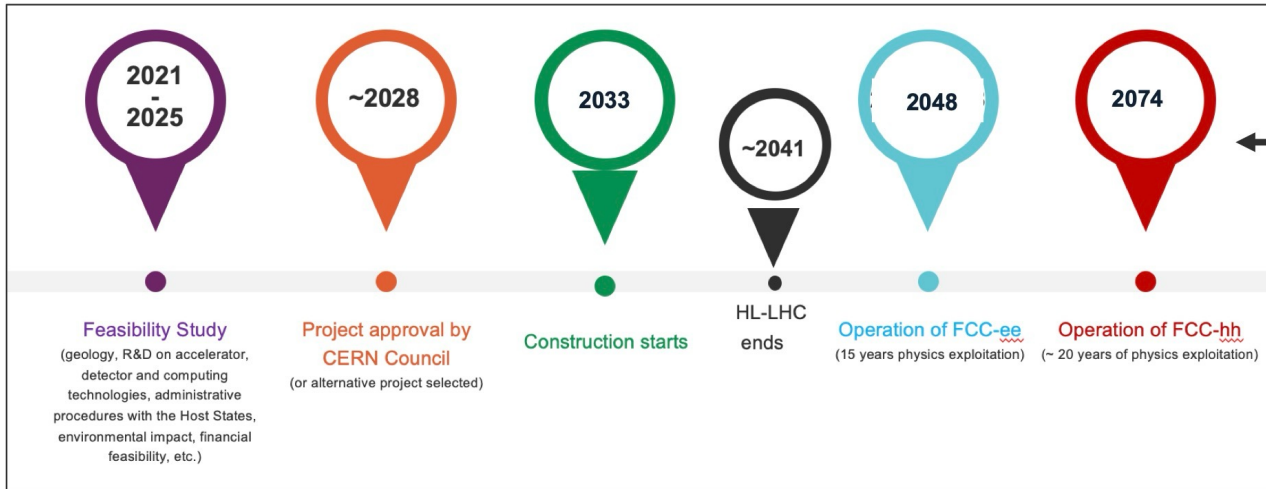
- quite impressive progress
- “ideal” placement identified
- no major showstoppers identified
- this is getting serious!

more: Frank Simon, Joachim Mnich

FCC feasibility study



FCC estimated timeline



“Realistic” schedule taking into account:

- past experience in building colliders at CERN
- approval timeline: ESPP, Council decision
- territorial implementation and admin procedures
- that HL-LHC will run until 2041

Note:

Care should be taken when comparing to other proposed facilities, for which in some cases only the (over-optimistic) technical schedule is shown

1st stage collider, FCC-ee: electron-positron collisions 90-360 GeV

Construction: 2033-2046 → Physics operation: 2048-2063

2nd stage collider, FCC-hh: proton-proton collisions at ≥ 100 TeV

Construction: 2058-2073 → Physics operation: 2074-2095

Note: schedule can be accelerated if more resources available

Further Council decisions in 2023 (selection)

- endorsed efforts to secure (renewable) energy through PPAs (ongoing...)
- endorsed implementation plan for ECFA detector R&D organisation (DRDs)
- approved first ever scientific project funded by private donor (NextGen Triggers Project, 48 MUSD / 5 years, Eric and Wendy Schmidt Fund for Strategic Innovation)
- approved to host an Open Quantum Institute at CERN as a three-year pilot project
- approved Mid-Term Plan (MTP 24-28) (includes e.g. ECN3 beamline preparation (prerequisite for new fixed target/beam dump expts in NA))

Upcoming in 2024:

- FCC Midterm Report evaluation in Feb 24
- ECN3 experiments decision
- election of next DG in Nov 24
- election of next President of Council
- selection of Strategy Secretary of the next ESPPU (2025-26)

Information sources

All Council Documents are kept on cds

<https://cds.cern.ch/search?cc=Council+and+Committee+of+Council&ln=de&jrec=11>

(many are public)

All Council Decisions

<https://council.web.cern.ch/en/decisions>

Summaries from directorate are useful:

<https://indico.cern.ch/category/8140/>