



Doing Business with CERN Israel@CERN

Lisa Bellini-Devictor

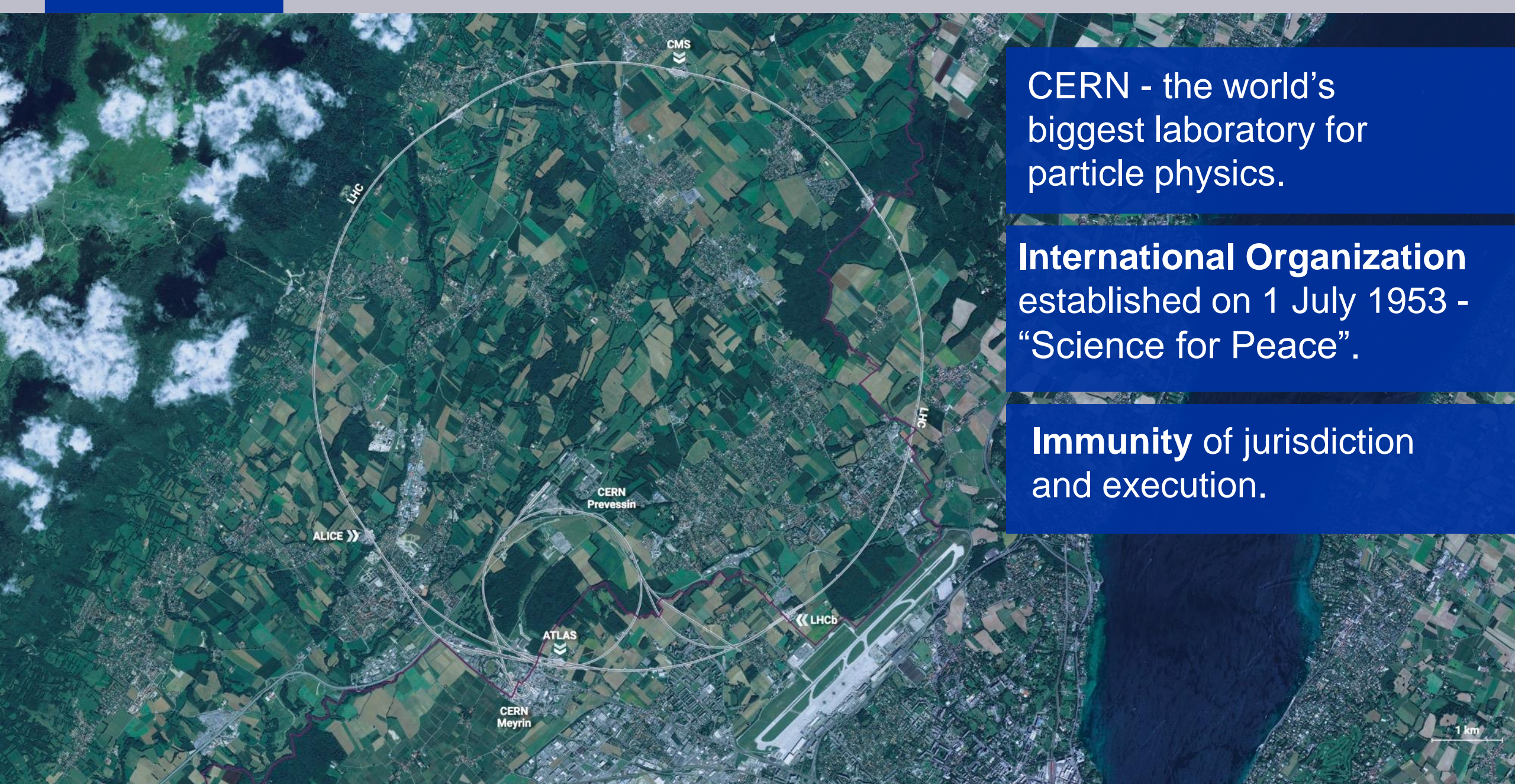
7 March 2022



AGENDA

- Introduction
- Key figures
- Procurement @ CERN - the rules
- Impact of Doing business with CERN
- Procurement website

INTRODUCTION



CERN - the world's biggest laboratory for particle physics.

International Organization established on 1 July 1953 - "Science for Peace".

Immunity of jurisdiction and execution.

CERN is entitled to establish its own internal rules necessary for its proper functioning, including:



Procurement Rules

Safety Rules

Staff Regulation of its own
personnel

In 1954 CERN had 12 Member States

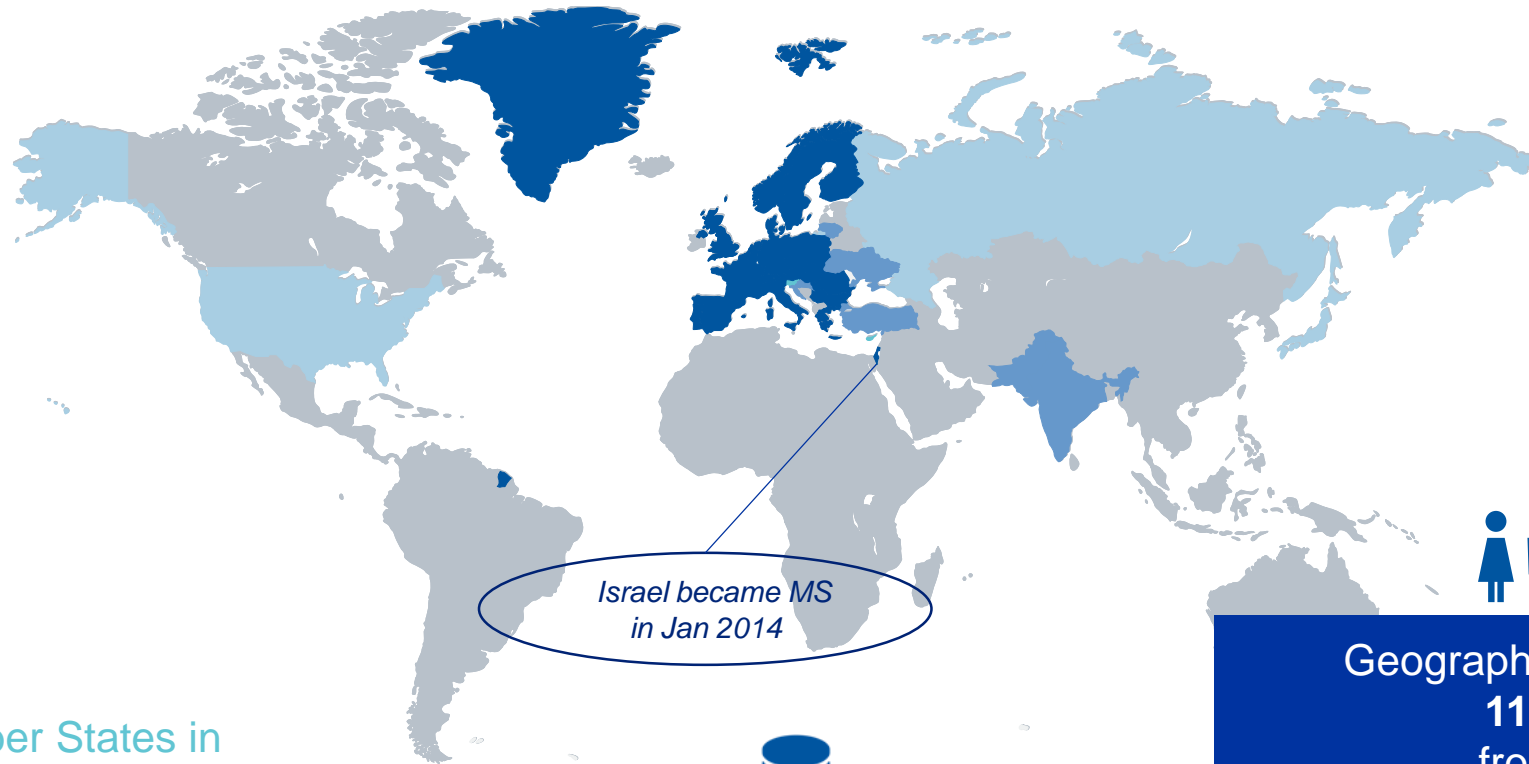
Today CERN has 23 Member States

23 Member States

3 Associate Member States in the pre-stage to membership

7 Associate Member States

6 Observers



Israel became MS
in Jan 2014



Yearly budget ~ 1100 MCHF



Geographical & cultural diversity
110 nationalities,
from **77** countries

~ **2500** Staff members
~ **2000** contractors' employees
~ **13000** physicists /users

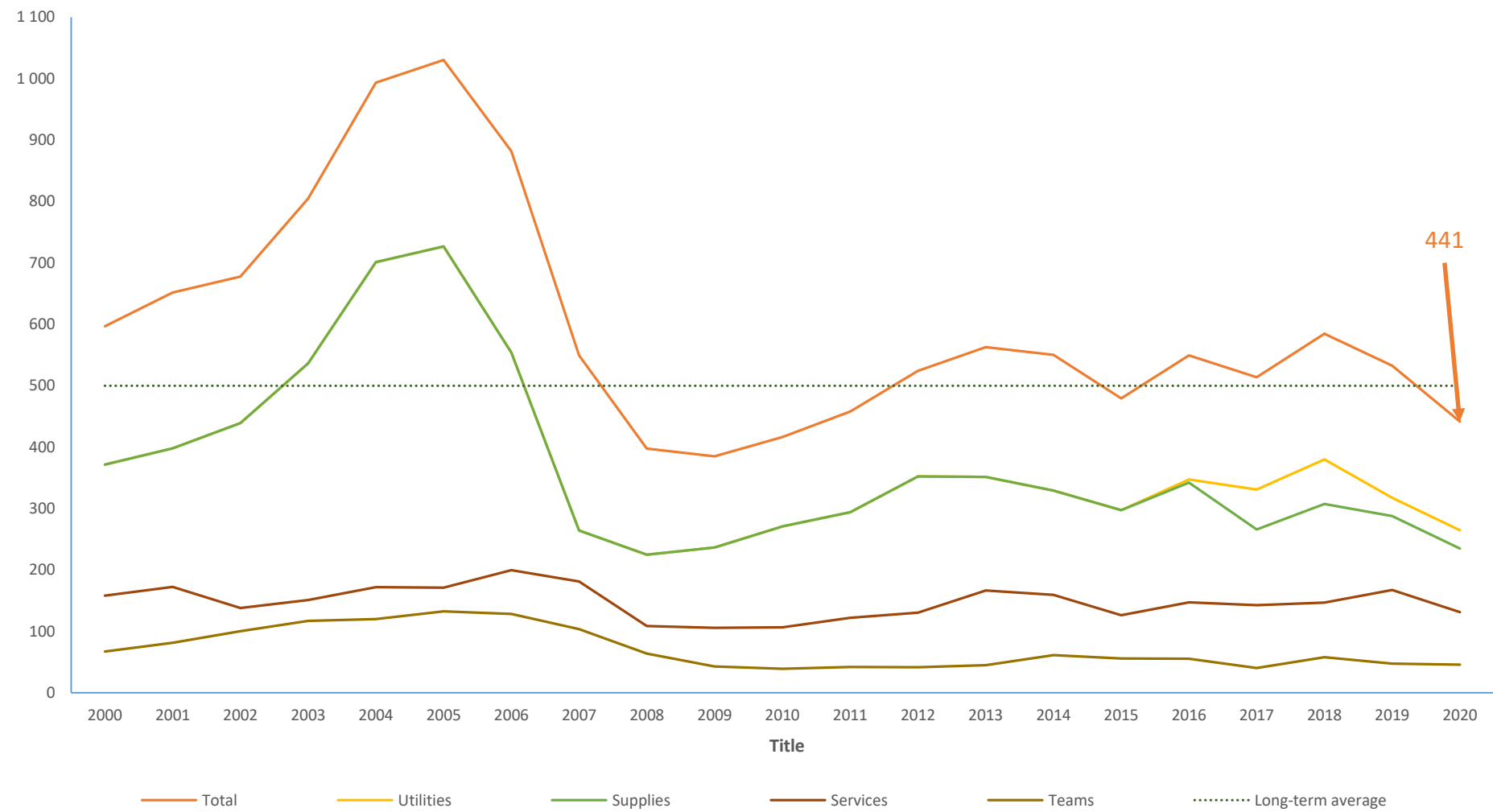
Key Figures

Yearly Budget (contributions 2022)

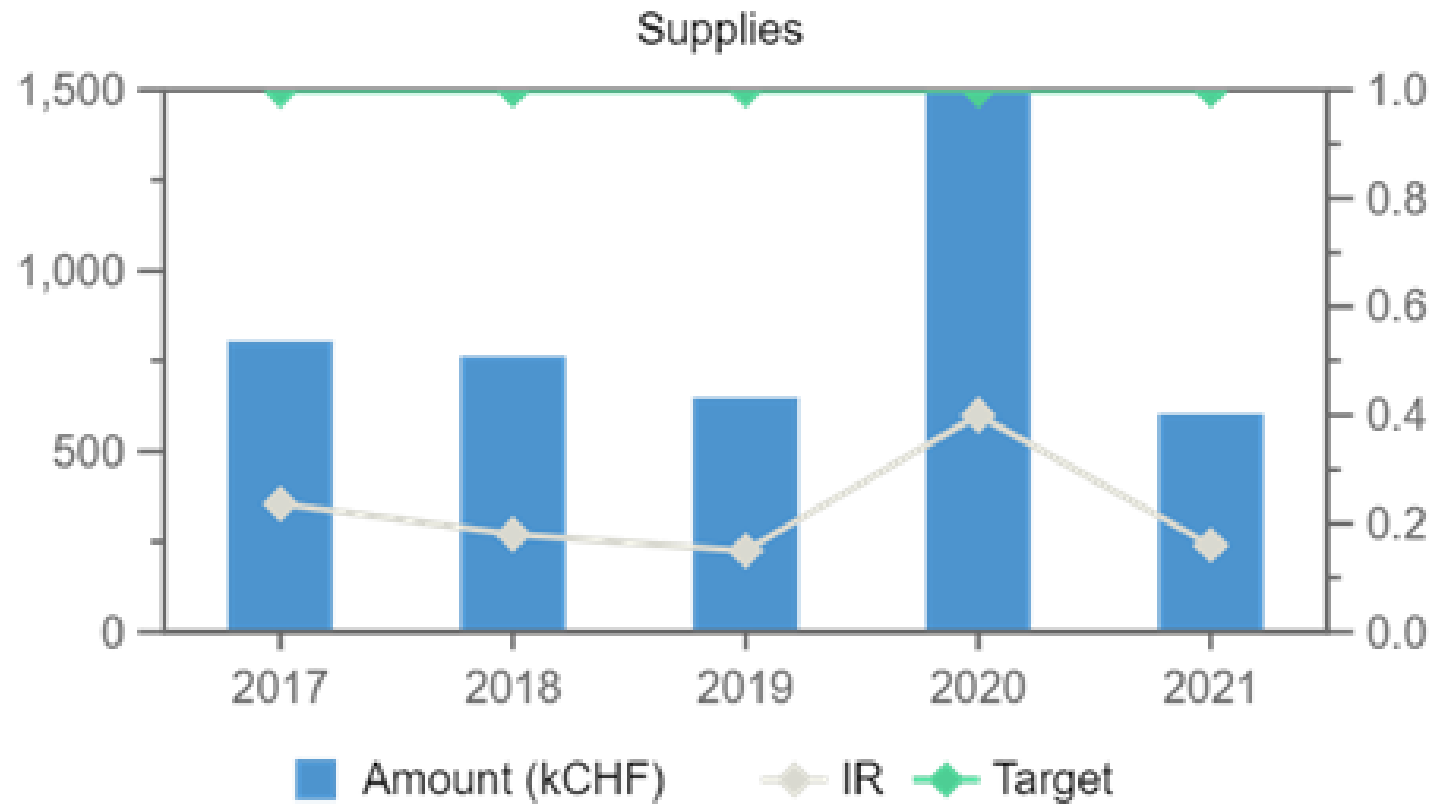
Country	In CHF, 2022 prices	%
Germany	245 017 700	20,3%
United Kingdom	171 219 200	14,2%
France	161 894 900	13,4%
Italy	121 766 050	10,1%
Spain	87 403 500	7,2%
Netherlands	55 847 250	4,6%
Switzerland	46 281 900	3,8%
Poland	34 787 950	2,9%
Belgium	32 668 100	2,7%
Sweden	30 045 050	2,5%
Norway	26 636 300	2,2%
Austria	25 937 750	2,2%
Israel	23 501 450	1,9%
Denmark	21 381 600	1,8%
India*	16 838 200	1,4%
Finland	15 708 050	1,3%
Romania	14 424 700	1,2%
Czech Republic	13 220 000	1,1%

Country	In CHF, 2022 prices	%
Portugal	13 148 350	1,1%
Greece	11 894 950	1,0%
Hungary	8 580 300	0,7%
Slovakia	6 151 800	0,5%
Turkey*	4 961 450	0,4%
Bulgaria	3 977 800	0,3%
Serbia	3 002 950	0,2%
Pakistan*	1 843 950	0,2%
Slovenia*	1 484 800	0,1%
Estonia*	1 310 850	0,1%
Cyprus*	1 025 350	0,1%
Latvia*	1 024 850	0,1%
Croatia*	1 000 000	0,1%
Lithuania*	1 000 000	0,1%
Ukraine*	1 000 000	0,1%
Total	1 205 987 050	100,0%

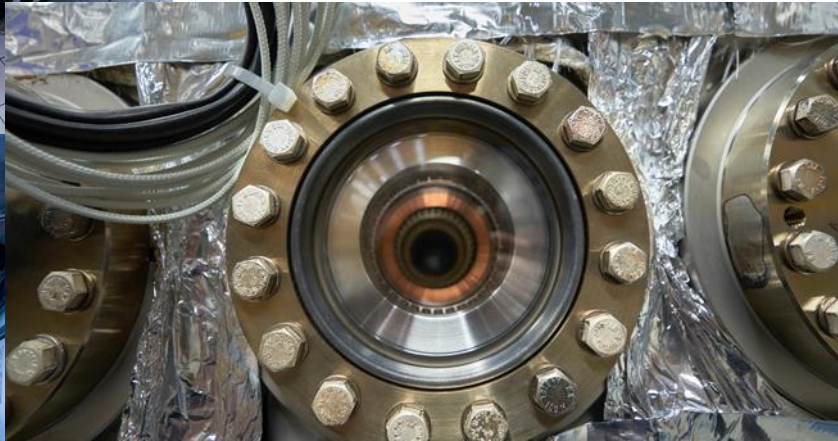
Procurement Expenditure (all MS and AMS)



Industrial Return (supplies) - Israel

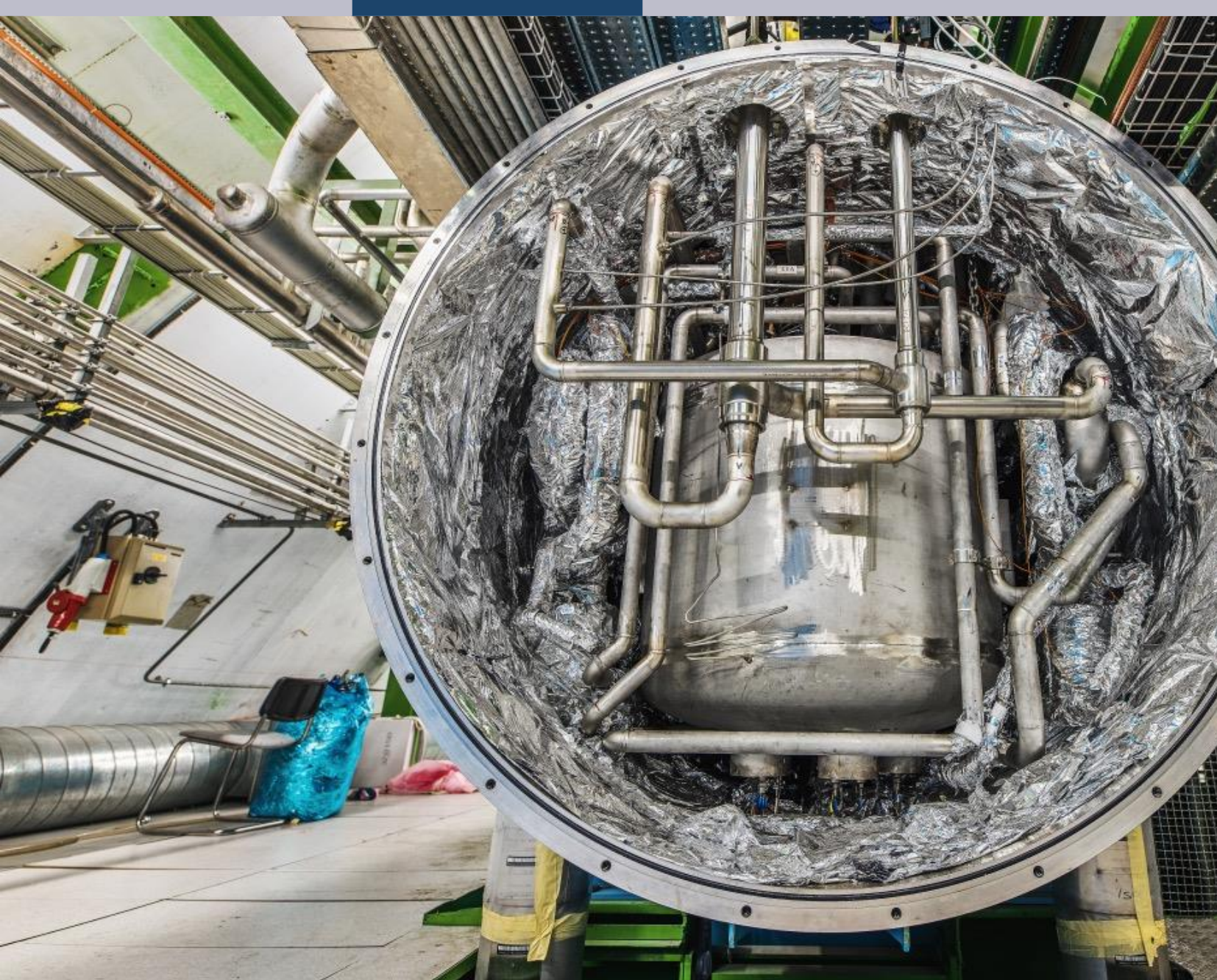


* provisoire



What do we buy?

- **Supplies and Services**
- **12 categories (Procurement Codes) e.g.**
 - Civil engineering
 - Cooling and ventilation equipment
 - Electrical engineering and Magnets
 - Mechanical Engineering and Raw materials
 - Information Technology
 - Electronics and RF



What do we buy?

- **As well as:**
 - Cryogenic and vacuum equipment
 - Optics and photonics
 - Particle and photon detectors
 - Health and safety equipment,
 - Transport and handling equipment
 - Office supply, furniture
 - Industrial services on the CERN site

Current project - upgrade of the LHC to High Luminosity



Hi-Lumi will provide greater precision and discovery potential

Hi-Lumi will start operating in 2026, and run until 2035

CERN is already looking beyond 2035, with several projects in R&D or study stages

Two biggest projects for future of particle physics



Compact Linear Collider (CLIC)

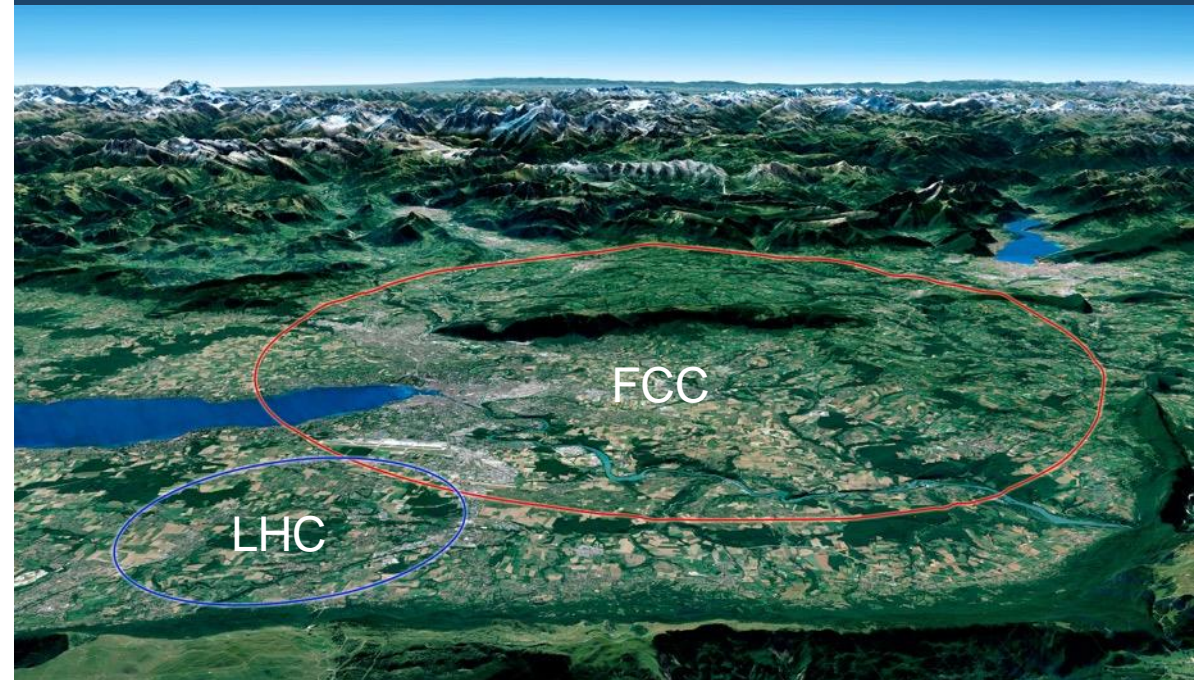
- Linear e^+e^- collider \sqrt{s} up to 3 TeV



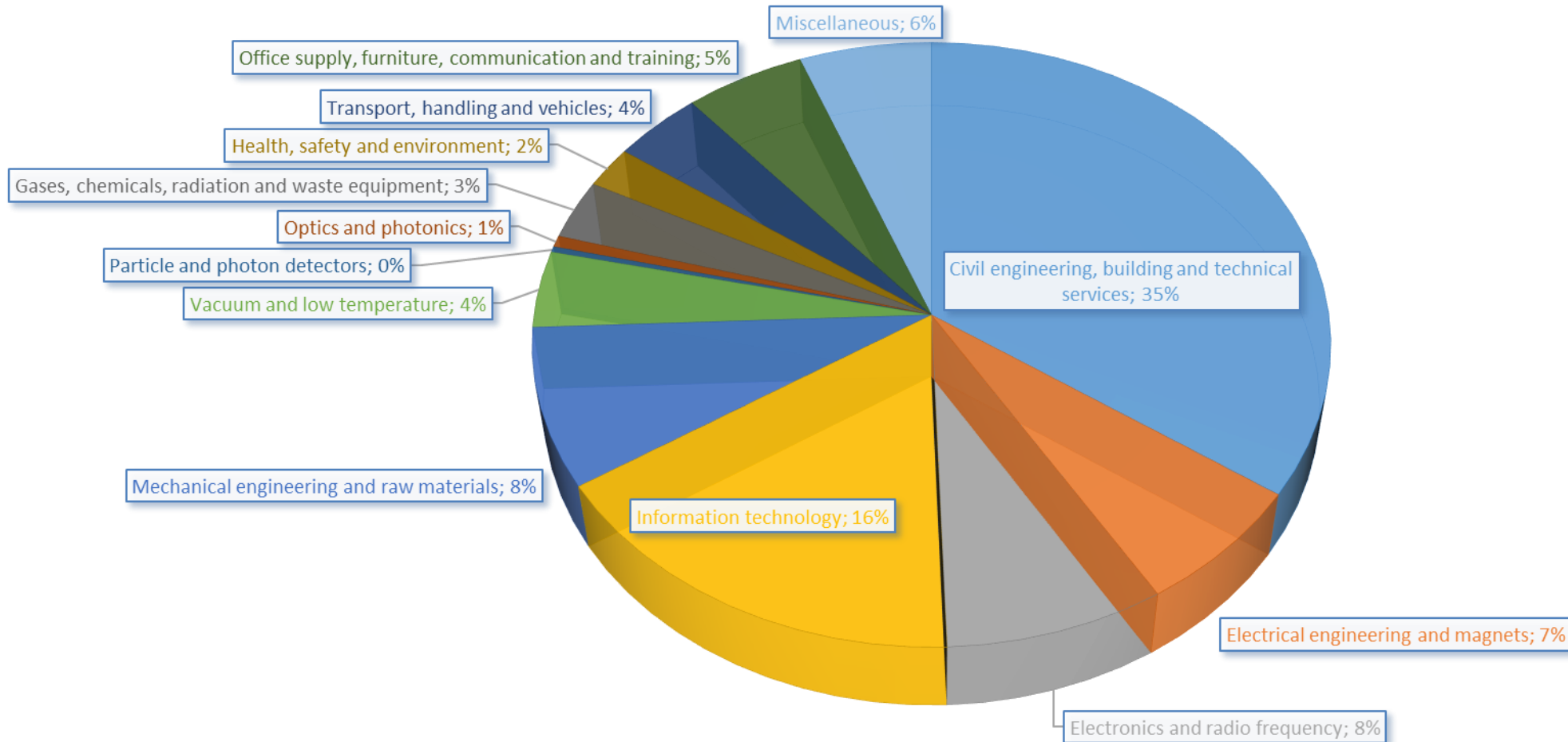
Future Circular Collider (FCC)



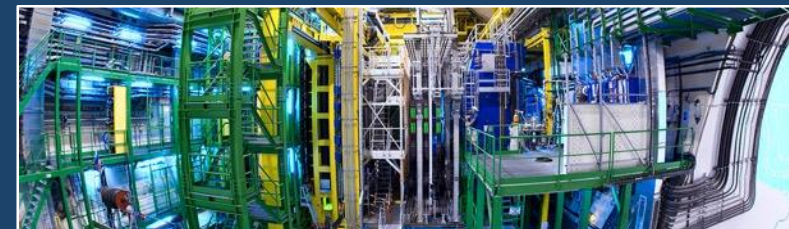
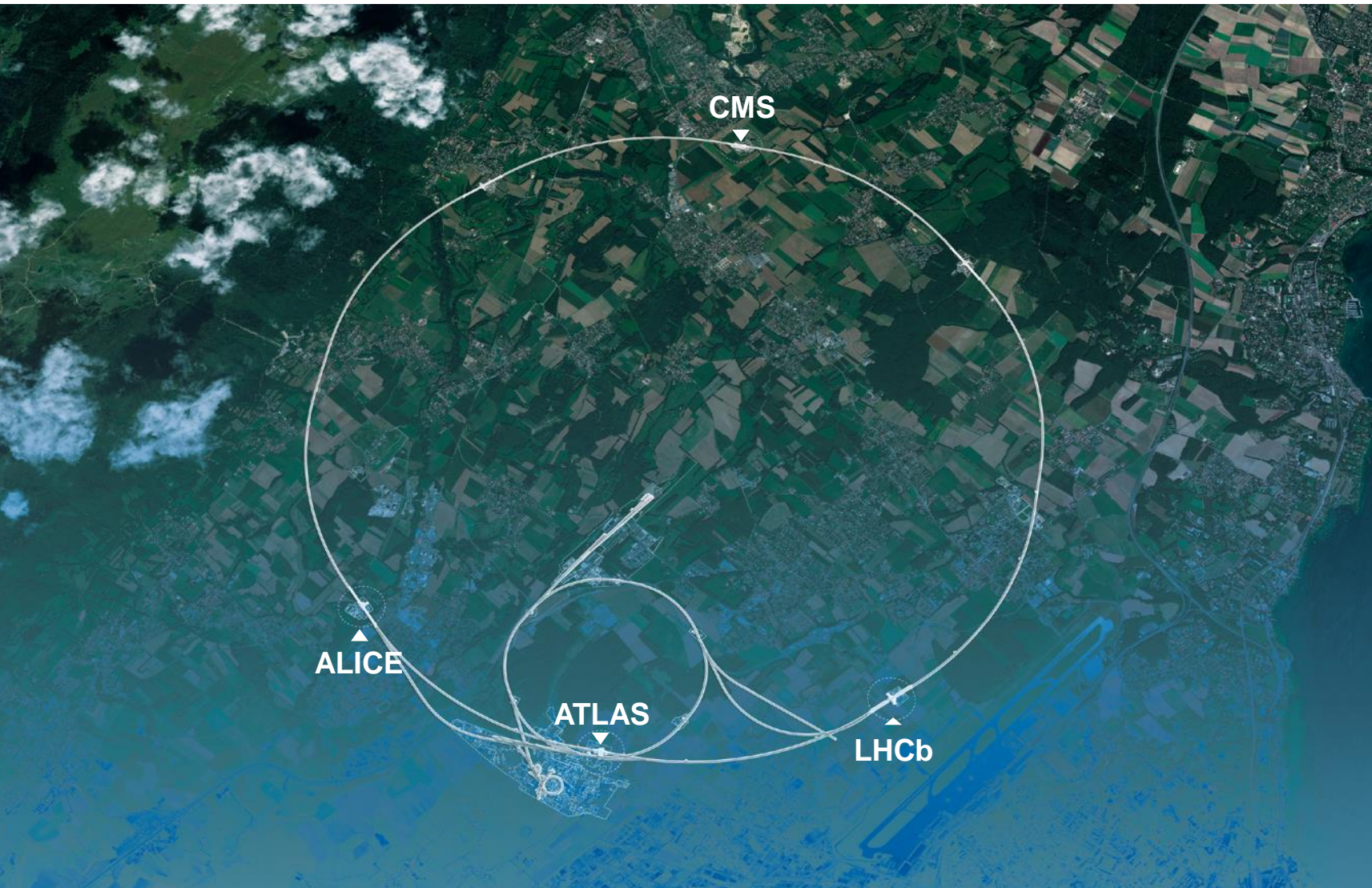
- New technology magnets \rightarrow 100 TeV pp collisions in 100km ring
- e^+e^- collider (FCC-ee) as 1st step?



Supplies (229 MCHF spent in 2021, all countries – CERN budget only)



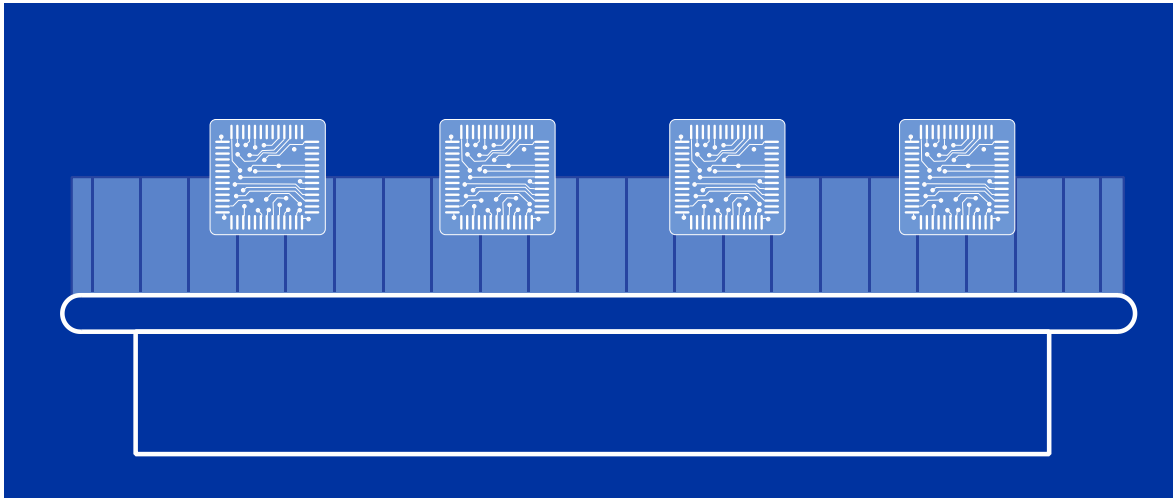
We also buy for the LHC experiments



How do we buy?

Off-the shelf or non-standard products which can be produced with existing manufacturing techniques or technologies:

- **Functional specification**

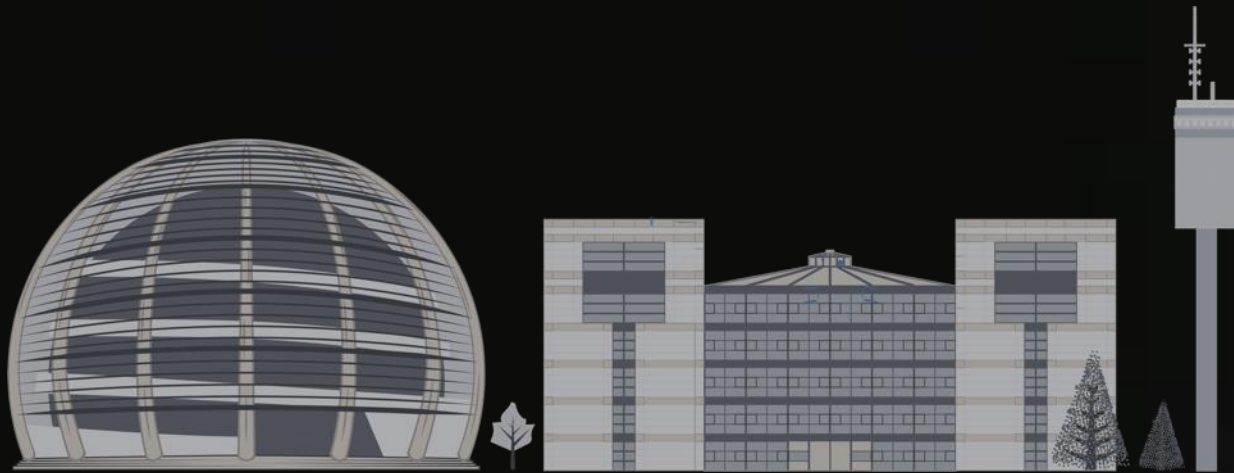


Non-standard products where industry has neither the required know-how nor the interest to develop and design the products:

- **Build-to-Print specification**

Prototypes and or Pre-series might be required.





PROCUREMENT @CERN the rules

The Procurement Service

Mission

**The Procurement Service (PS)
procures all supplies and
services for CERN**

Meeting the specified and
contractual technical, delivery
and performance requirements

At the lowest possible overall cost

While achieving balanced
industrial return for CERN
Member States

Respecting CERN
Procurement Rules

Principles of the Procurement Rules (1/4)

1

Transparency and Impartiality

2

Tenders open to Member States only

3

Objectivity and equal treatment: tendering packages are objective and impartial

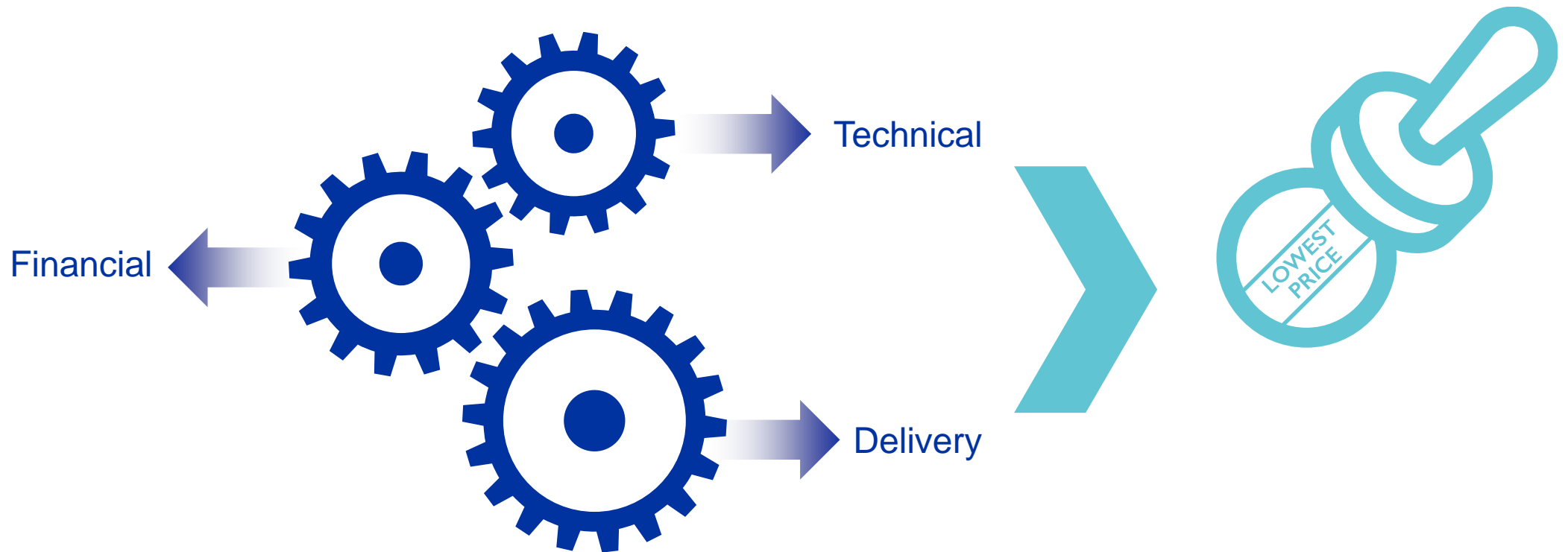
Principles of the Procurement Rules (2/4)

Selective tendering procedures:
CERN's tendering procedures are not open to any interested firms

Confidentiality: Opening and evaluation of bids as well as negotiations are not public

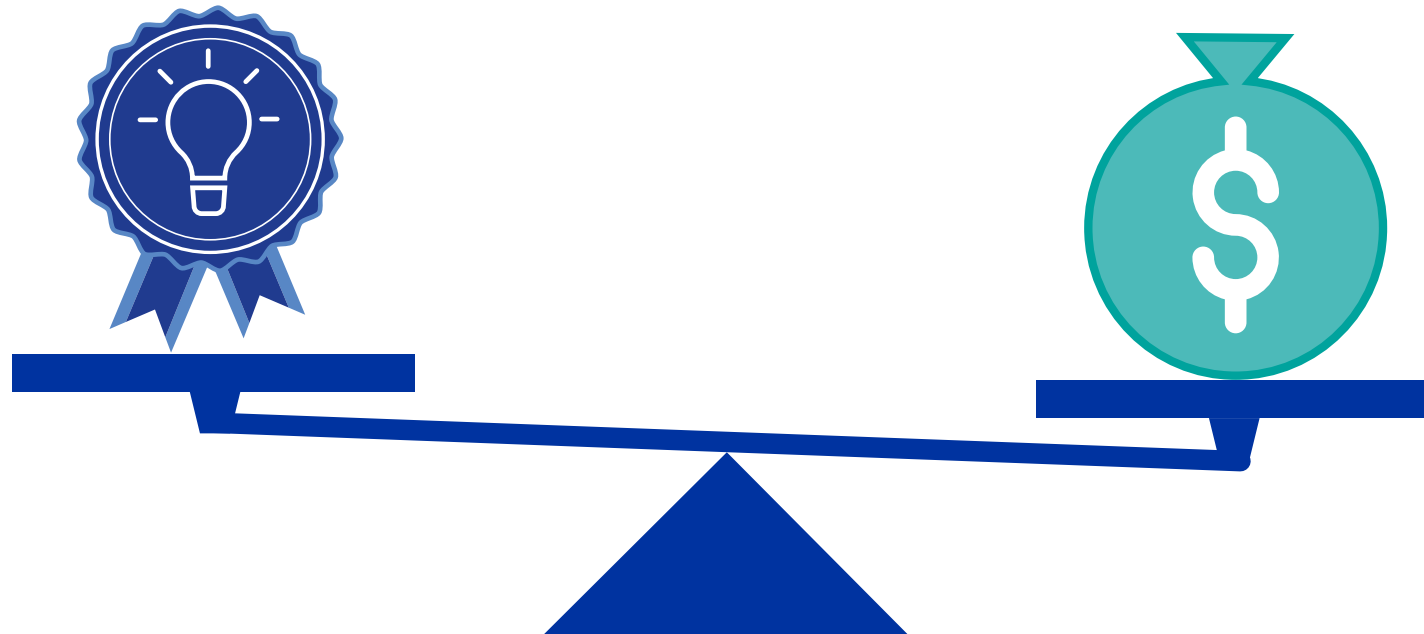
Principles of the Procurement Rules (3/4)

Award for supplies (and services, exceptionally) based on:
Lowest compliant bid



Principles of the Procurement Rules (4/4)

Award for industrial services based on:
Best Value For Money



! No alignment rule

Enquiries between 10'000 and 200'000 CHF

“Price enquiry” (Demande d’Offre - DO)

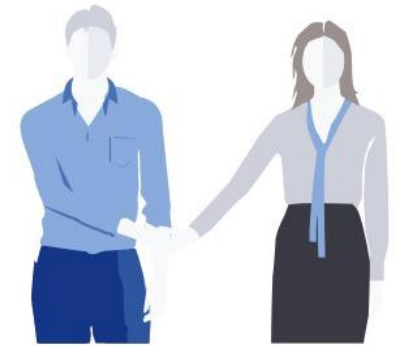
- **Submission deadline: 4 weeks from date of dispatch;**
- **All price enquiries above 50'000 CHF are also sent to the Industrial Liaison Officers (ILOs) for information;**
- **Price enquiries consist of:**
 - Technical specification and annexes;
 - Tender form (and a technical annex - optional);
 - CERN’s General Conditions (contracts, invitations to tender, safety, etc.)



Enquiries exceeding 200'000 CHF (1/2)

“Market Survey” (MS)

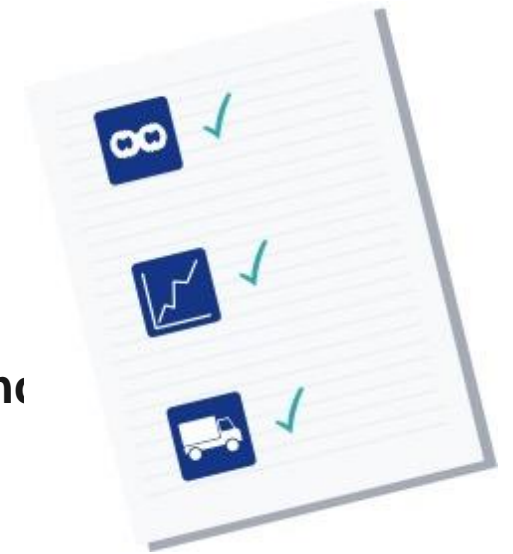
- **Prior announcement in CERN’s procurement website, see “Business Opportunities”**
 - At this stage, interested firms are encouraged to contact CERN in order to have a clear understanding of the requirement, allowing them to begin their organization ahead of the tendering process.
- **Market surveys consist of:**
 - “Technical Description” and;
 - “Qualification Questionnaire” (financial and technical).
- **Submission deadline: 4 weeks, or more if the MS is still online.**



Enquiries exceeding 200'000 CHF (2/2)

“Invitation to tender” (IT)

- Sent to qualified and selected firms only;
- Submission deadline: 4 weeks from date of dispatch (with a longer period for more complex requirements);
- Firms shall ask all necessary questions in writing to understand all requirements and prepare a bid that best matches CERN's needs;
- All invitations to tender are sent to the Industrial Liaison Officers (ILOs) for information;
- Bids shall be submitted via CERN's e-tendering application.



Country of origin

“Country(ies) in which the bidder is established.”

If at least **40%** of the total amount of the bid comes from a poorly balanced MS, then the **whole bid** will be treated as that from a bidder in a poorly balanced MS.



*“Country(ies) where the **supplies** (including their components and sub-assemblies) are manufactured or undergo the last major transformation by the contractor or its sub-contractor”*

If at least **60%** of the total amount of the bid comes from a poorly balanced MS, then the **whole bid** will be treated as that from a bidder in a poorly balanced MS.

Alignment rule

Applicable for:

1

Contracts awarded on the lowest compliant basis (mainly supply contracts)

2

With a total amount exceeding 100'000 CHF.

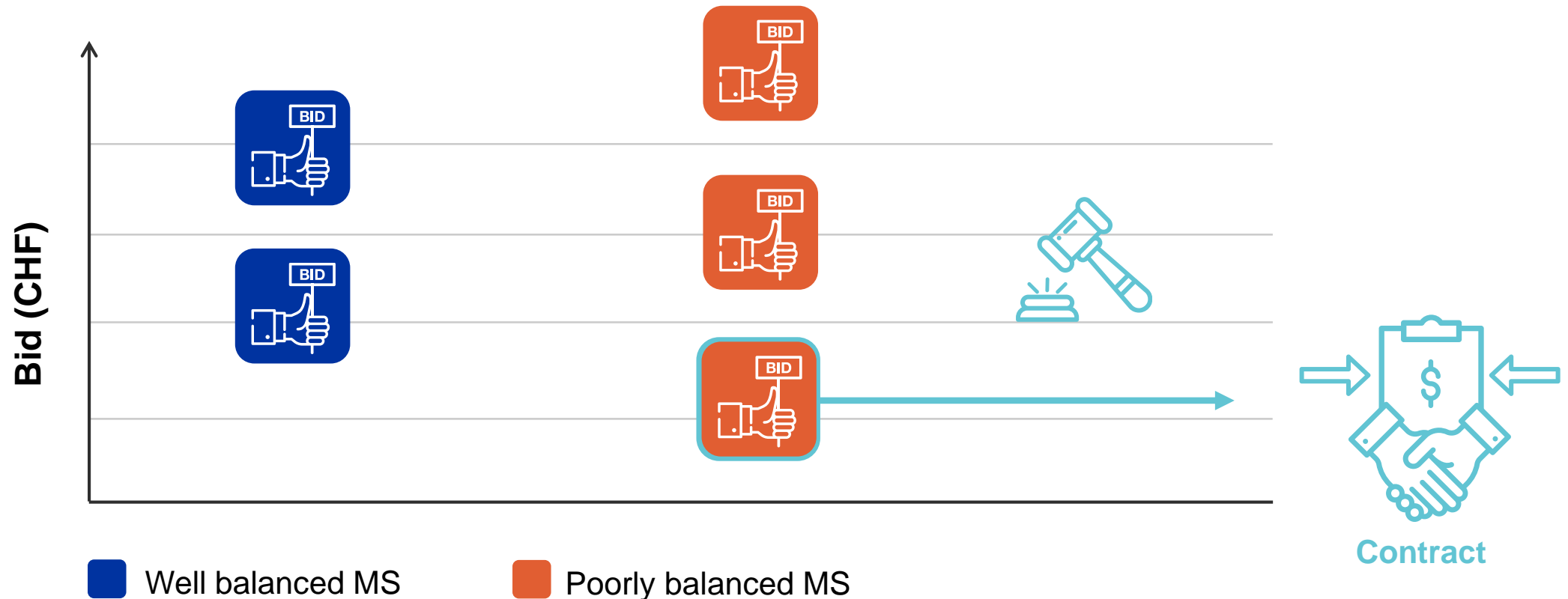
RULE

Under certain conditions as defined in CERN Procurement Rules, a bidder offering goods originating* in poorly balanced Member States is allowed to align his price to that of the lowest bidder and thereby be awarded the contract.

* At least 60% for supply contracts or; at least 40% for service contracts awarded on the lowest compliant basis.

Alignment rule (Scenario 1)

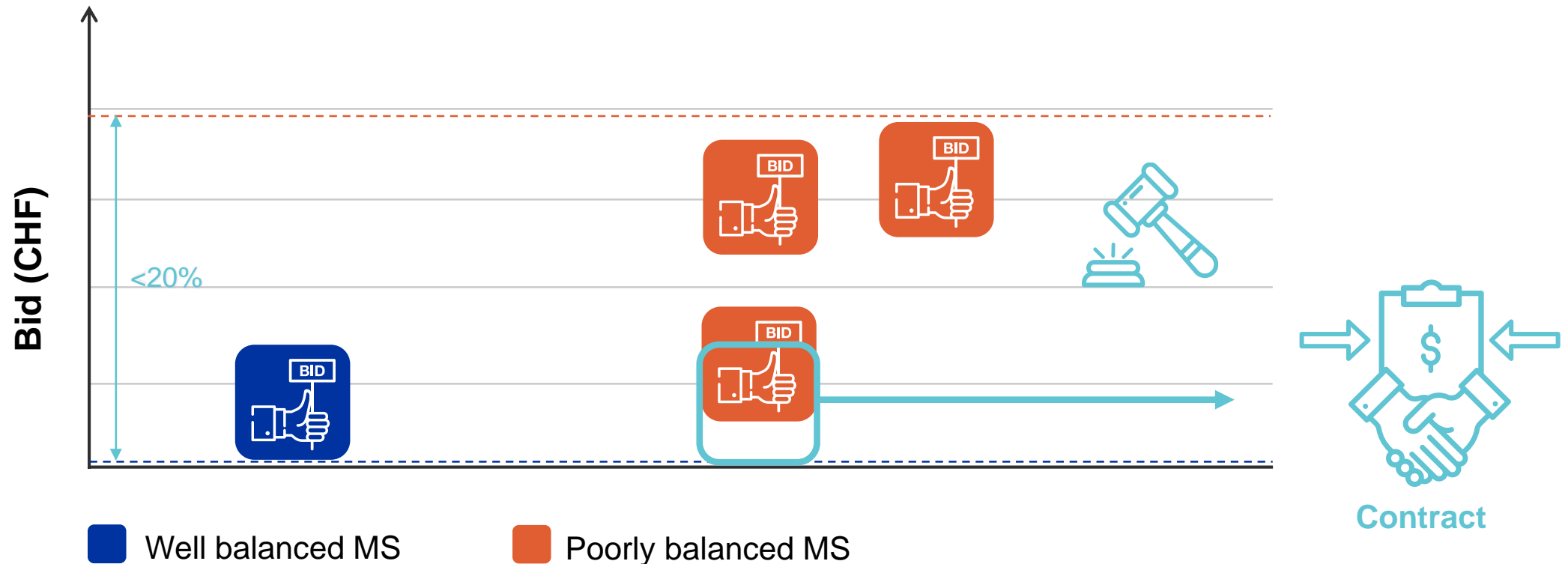
Lowest bid from a PB MS



Alignment rule (Scenario 2)

Lowest bid from a WB MS

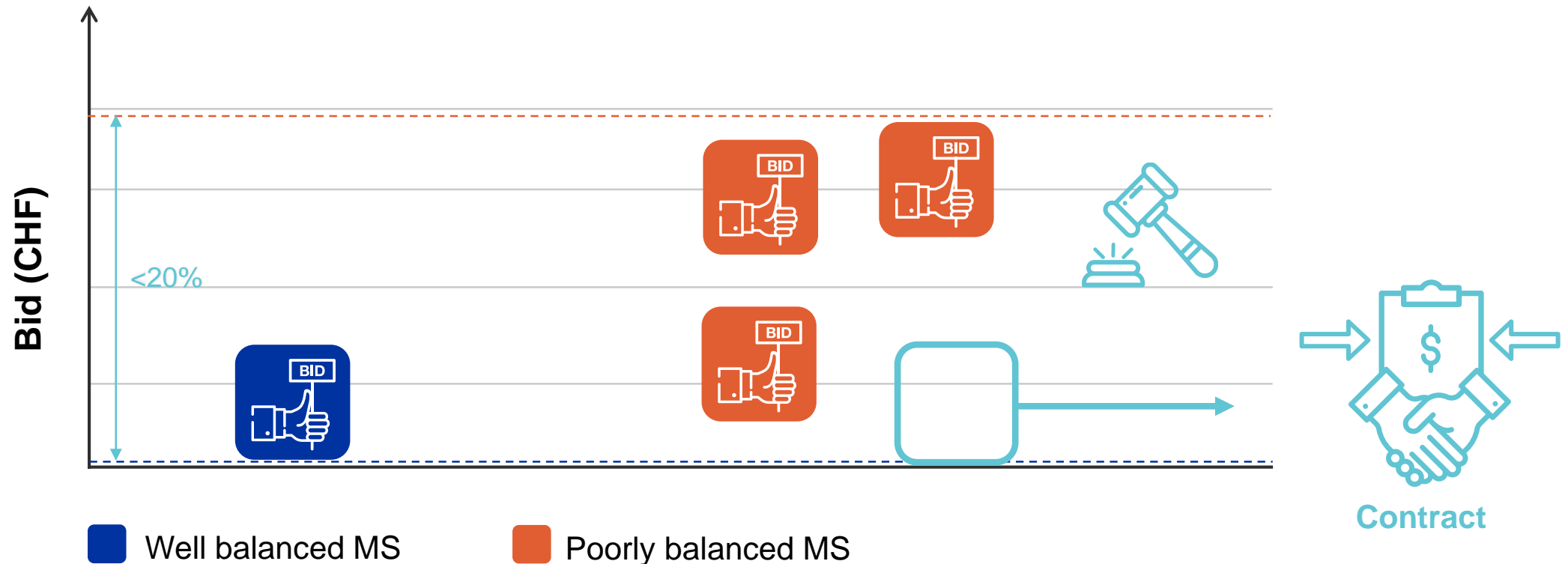
(a) 1st bidder from PB MS aligns



Alignment rule (Scenario 2)

Lowest bid from a WB MS

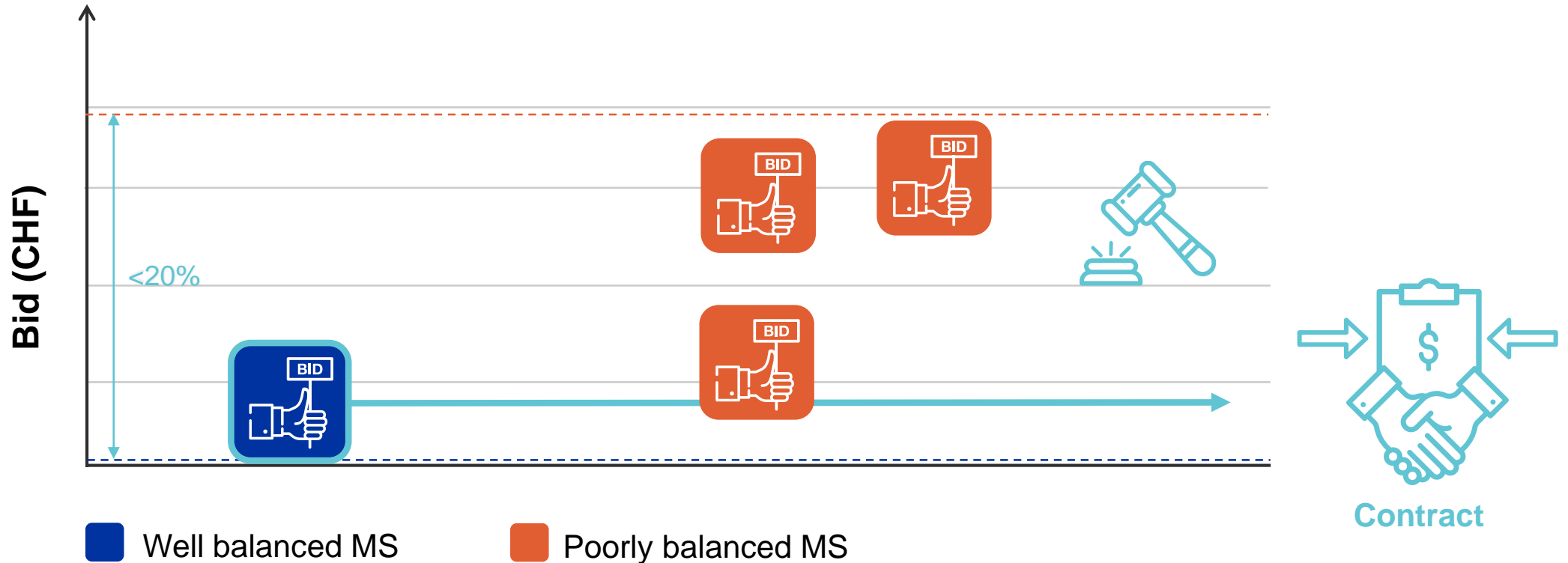
(b) if not, 2nd lowest bidder from PB MS aligns



Alignment rule (Scenario 2)

Lowest bid from a WB MS

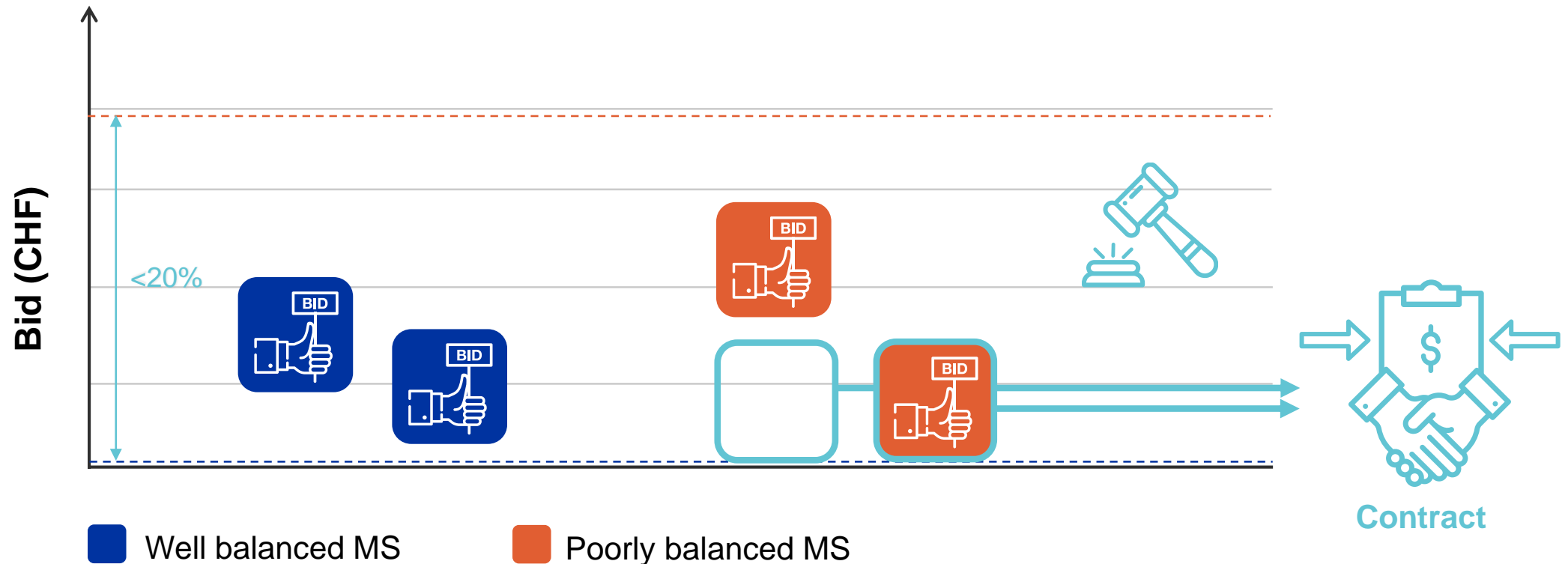
(c) if no alignment of second two bids, contract placed with lowest bidder from WB MS



Alignment rule with splitting (Scenario 3)

Lowest bid from a PB MS another bid from a PB MS falls within 20% of the lowest

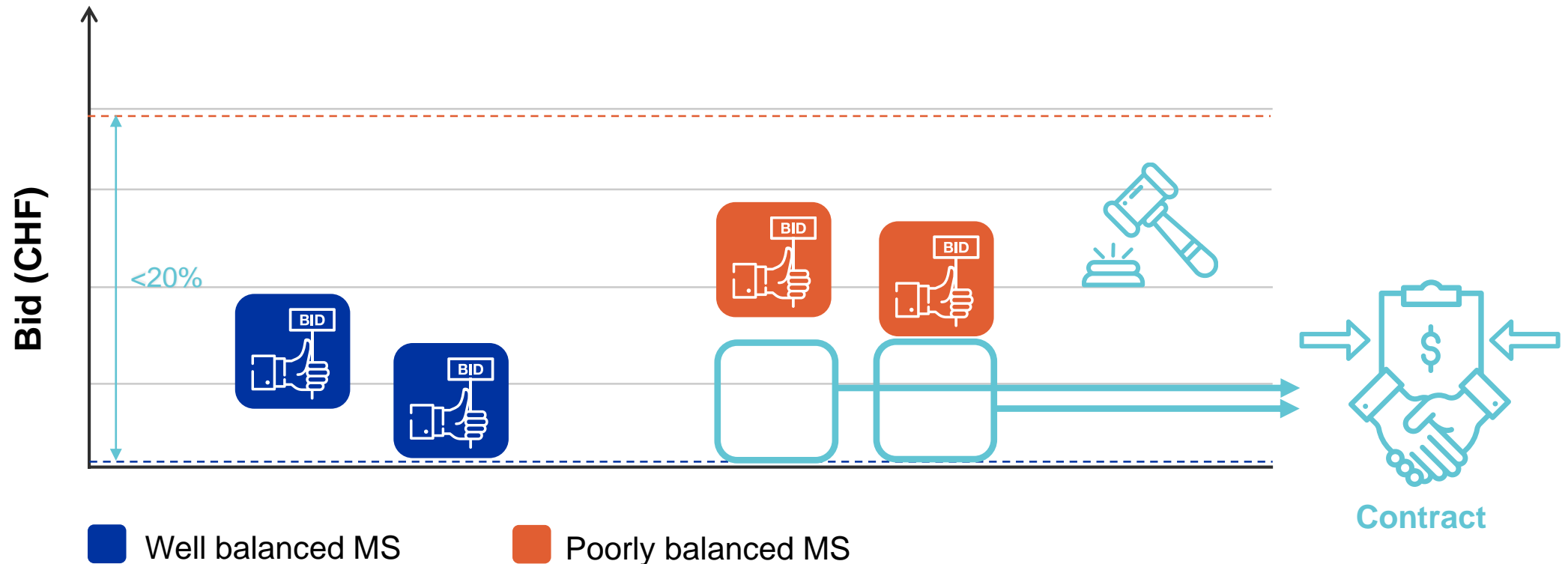
Bidder from PB MS aligns → **contracts placed** with the 2 lowest bids from PB MS



Alignment rule with splitting (Scenario 4)

Lowest bid from a WB MS and two bids from PB MS fall within 20% of the lowest

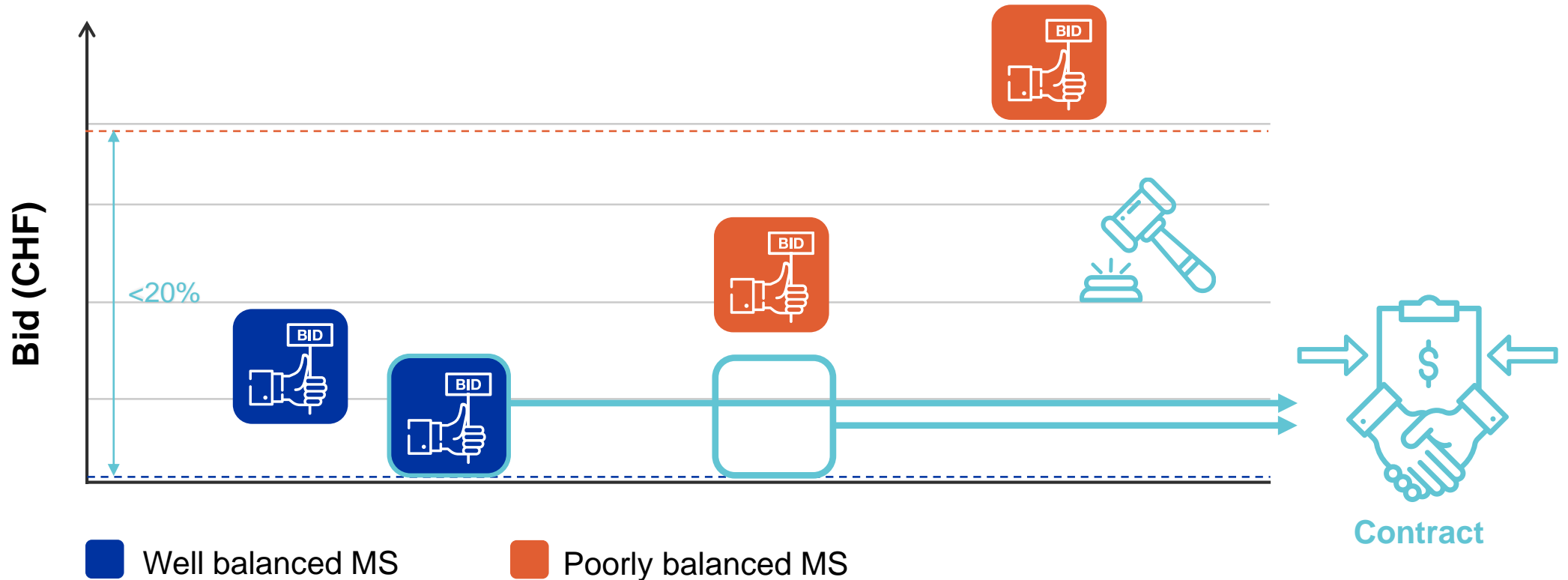
Both bidders from PB MS align \longrightarrow contracts placed with bids from PB MS



Alignment rule with splitting (Scenario 5)

Lowest bid from a WB MS and a bid from PB MS falls within 20% of the lowest

Lowest bidder from PB MS align  contracts placed with the lowest bid and the bid from PB MS



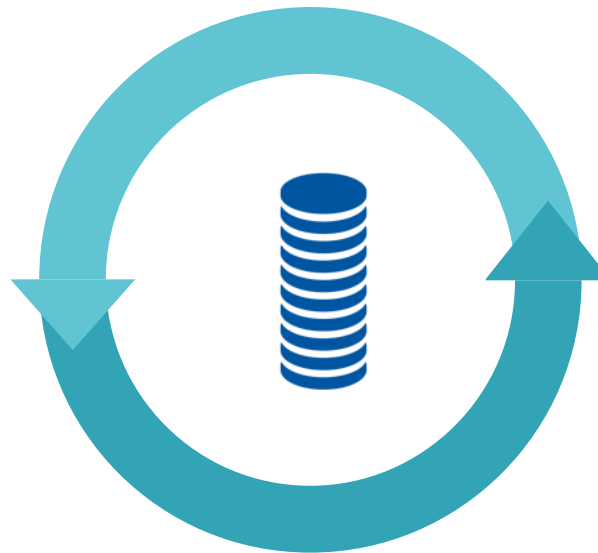
Industrial return coefficient

Industrial return coefficient

For Supply contracts and for a 12-month period starting on 1st March, defined as:

“The ratio between a Member State's percentage share of the value of all Supply contracts and that Member State's percentage contribution to the CERN Budget over the same period”.

$$\text{Return Coef.} = \frac{\% \text{ expenditure in the MS}}{\% \text{ contribution to CERN budget for this MS}}$$



Over a 4-year period:

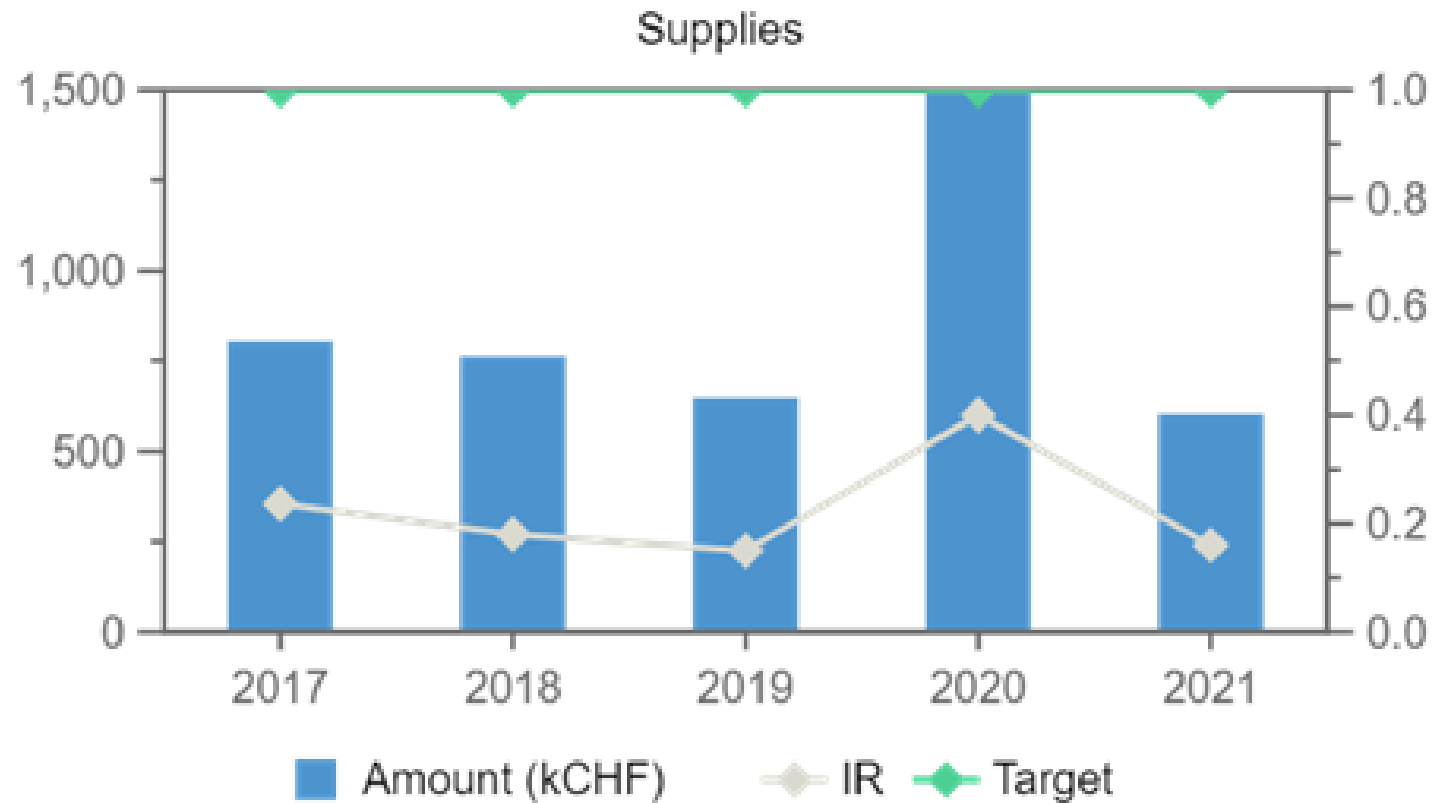
Very poorly balanced : < 0.40

Poorly balanced (PB) : $0.40 \geq x < 1$

Well balanced (WB): ≥ 1

Status definition

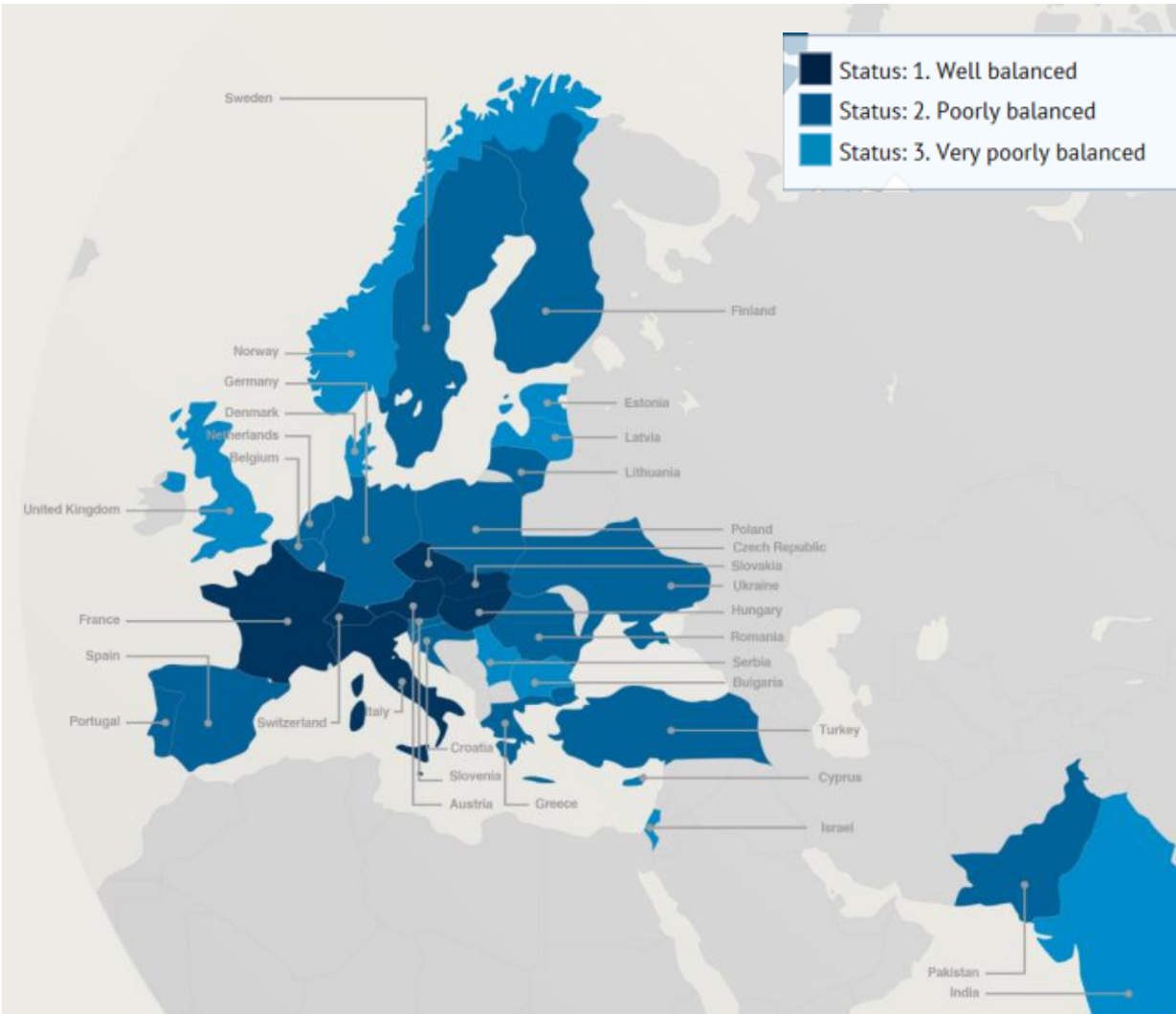
Industrial Return (supplies) - Israel



* provisoire

Poorly balanced Member States (Supplies)

(1st March 2022 – 28 February 2023, based on the previous 4 calendar years):



Well Balanced	Poorly Balanced	Very Poorly Balanced
Austria Czech Republic France Hungary Italy Slovak Republic Switzerland	Belgium Croatia* Cyprus* Finland Germany Greece Lithuania* Netherlands Pakistan* Poland Portugal Romania Slovenia* Spain Sweden Turkey* Ukraine*	Bulgaria Denmark India* Israel Latvia* Norway Serbia* United Kingdom

*Associate Member States

Limited tendering


« *Limited tendering is foreseen by the CERN Procurement Rules to improve the industrial return of very poorly balanced Member States. »*

Conditions

Firms established in very poorly balanced Member States only (industrial return <0.4);

Used in case where there is sufficient competition;

ILO can ask to add firms, provided they are established in very poorly Member States.

A close-up photograph of two people shaking hands in a business setting. The person on the left is wearing a light-colored shirt, and the person on the right is wearing a dark suit. The background is blurred, showing other people in business attire. A large purple circle is overlaid on the right side of the image, containing the title text.

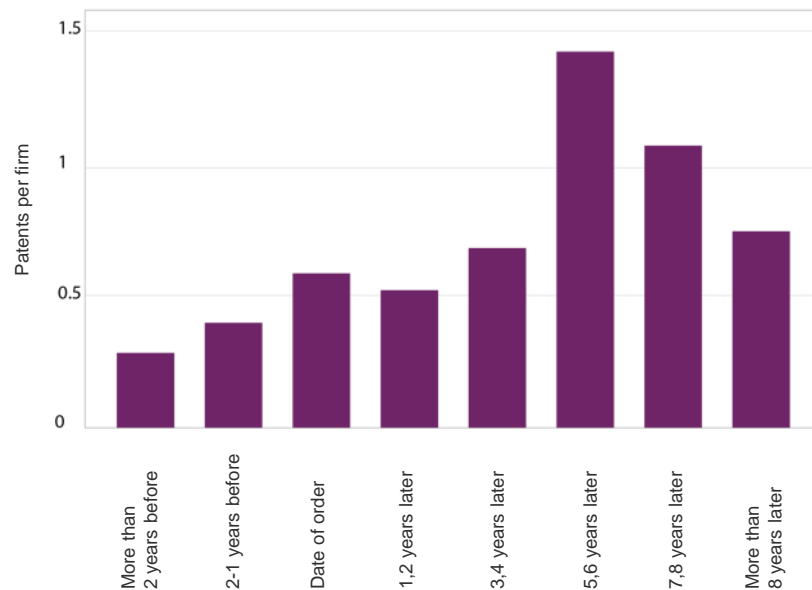
Impact of Doing business with CERN

The economical impact of CERN Procurement on supplier's performance (Castelnovo et al, 2018)

Empirical studies (by the analysis of financial data from 1995 to 2008 from 365 CERN suppliers for the LHC) show that after working with CERN on high-tech contracts, CERN suppliers out-perform their peers by:

Investing more in R&D and filing more patents

Higher productivity, revenue and profitability



Doing business with CERN: the facts

supplier survey (669 suppliers in 33 countries, 2017):

48%

improved products and services

42%

developed new products

55%

improved technical knowledge
in their field



18%

found or opened a new market to
address

62%

used CERN as a marketing reference

Doing business with CERN: the facts



Using CERN as a marketing reference improve the reputation as suppliers

supplier





Social Cost-Benefit Analysis (CBA) calculated by the University of Milan

“Each CHF invested in HL-LHC project pays back approximately 1.8 CHF on societal benefits, including scientific, economic and cultural value (development of innovative technologies, industrial spillovers, skills acquired by students, etc.).”

Successful Bidders & Contractors

- ✓ Often small – medium sized and flexible firms
- ✓ Ensure full understanding of specifications – exceeded specifications may be too expensive
- ✓ Communicate proactively and constructively (problems, issues, alternatives, etc.)
- ✓ Ensure good working relationship with partners and sub-contractors
- ✓ Consider test and documentation requirements
- ✓ Make best offer directly



Procurement website



Website of the Procurement Service

<http://procurement.web.cern.ch>

Procurement and Industrial Services Group

[HOME](#) - [CERN PERSONNEL](#) - [INDUSTRIAL LIAISON OFFICERS](#) - [GROUP MEMBERS](#)

› Doing Business with CERN

Doing Business with CERN [edit](#)
Running a Contract with CERN [edit](#)
Procurement Process [edit](#)
Law applicable to contractors' personnel [edit](#)



› Business Opportunities



› Supplier Portal



› Key Reference Documents



› List of Poorly and Well Balanced Member State...



› Procurement strategy and policy



<https://found.cern.ch/java-ext/found/CFTSearch.do>



Register in the Suppliers Portal

MANDATORY

for all exchanges with CERN, in particular to:

- Be visible for future opportunities (with the procurement codes you have indicated),
- Receive and follow-up orders,
- Send invoices.

Suppliers Portal

Welcome to CERN's eProcurement platform

<https://procurement.cern.ch/asp/Home>

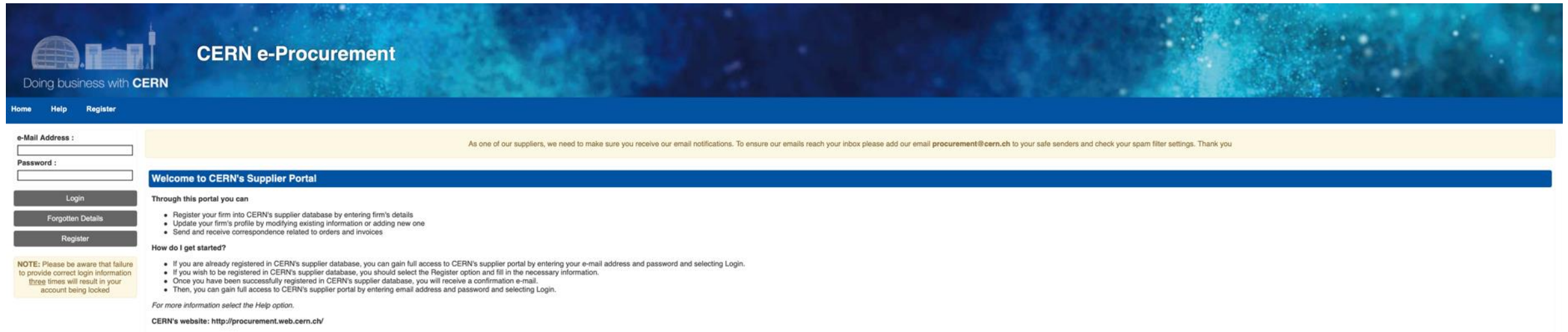
Using this platform, you will be able to receive orders, manage the delivery of supplies and send invoices for processing.

If you are having trouble registering your firm, please consult this [video tutorial](#) or the French version under [tutoriel](#).

Once you have registered your firm, you will be able to log on to the platform to manage your firm's profile and contact details.

If you have any further questions, please contact CERN's eProcurement platform support team at Supplierdb.Support@cern.ch.

CERN e-Procurement



The screenshot shows the CERN e-Procurement Supplier Portal. At the top, there is a header with the CERN logo and the text "CERN e-Procurement" and "Doing business with CERN". Below the header, there is a navigation bar with links for "Home", "Help", and "Register". The main content area is divided into two columns. The left column contains a login form with fields for "e-Mail Address" and "Password", and buttons for "Login", "Forgotten Details", and "Register". Below the login form, there is a note: "NOTE: Please be aware that failure to provide correct login information three times will result in your account being locked". The right column contains a welcome message: "Welcome to CERN's Supplier Portal". Below this, there is a section titled "Through this portal you can" with a list of bullet points: "Register your firm into CERN's supplier database by entering firm's details", "Update your firm's profile by modifying existing information or adding new one", and "Send and receive correspondence related to orders and invoices". Below this, there is a section titled "How do I get started?" with a list of bullet points: "If you are already registered in CERN's supplier database, you can gain full access to CERN's supplier portal by entering your e-mail address and password and selecting Login.", "If you wish to be registered in CERN's supplier database, you should select the Register option and fill in the necessary information.", "Once you have been successfully registered in CERN's supplier database, you will receive a confirmation e-mail.", and "Then, you can gain full access to CERN's supplier portal by entering email address and password and selecting Login." Below this, there is a link for "For more information select the Help option." and a link for "CERN's website: http://procurement.web.cern.ch/".

e-Mail Address :
Password :
Login
Forgotten Details
Register

NOTE: Please be aware that failure to provide correct login information three times will result in your account being locked

As one of our suppliers, we need to make sure you receive our email notifications. To ensure our emails reach your inbox please add our email procurement@cern.ch to your safe senders and check your spam filter settings. Thank you

Welcome to CERN's Supplier Portal

Through this portal you can

- Register your firm into CERN's supplier database by entering firm's details
- Update your firm's profile by modifying existing information or adding new one
- Send and receive correspondence related to orders and invoices

How do I get started?

- If you are already registered in CERN's supplier database, you can gain full access to CERN's supplier portal by entering your e-mail address and password and selecting Login.
- If you wish to be registered in CERN's supplier database, you should select the Register option and fill in the necessary information.
- Once you have been successfully registered in CERN's supplier database, you will receive a confirmation e-mail.
- Then, you can gain full access to CERN's supplier portal by entering email address and password and selecting Login.

For more information select the [Help option](#).

CERN's website: <http://procurement.web.cern.ch/>



To ensure our emails reach your inbox please add our email **procurement@cern.ch** to your safe senders and check your spam filter settings.

Contacts at CERN (Procurement and Technical)



Contact in your country

ILO: Industrial Liaison Officer

- **Who to contact in your Country**

Industrial Liaison Officers (ILO's) are appointed by CERN's Member States to facilitate the flow of communication between CERN and its suppliers. ILO's can provide advice on the opportunities available for doing business with CERN and the support available to firms in their local regions.



Ms Leora HADAR

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Email
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Website
<http://www.israel-trade.net>

Thank you



home.cern