



Doing Business with CERN Holland@CERN

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4 June 2019



AGENDA

- **Statistics**
- **Procurement @ CERN - the rules**
- **Procurement website**
- **Impact of Doing business with CERN**

STATISTICS



What do we buy?

- **Civil engineering:**
 - Construction
 - Renovation of buildings
 - Metallic structures
 - Earthworks
 - Roads
- **Cooling and ventilation equipment**



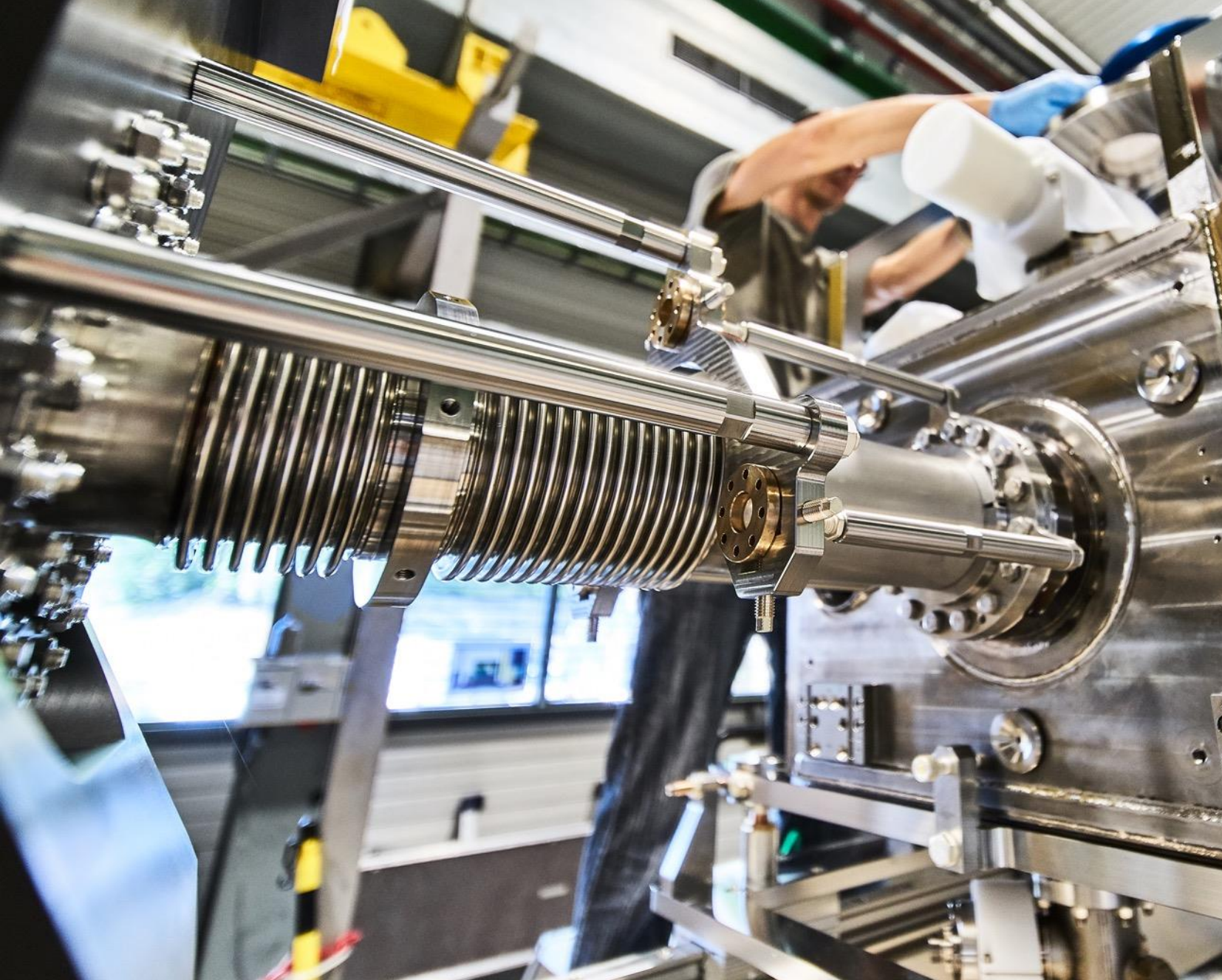
What do we buy?

- **Electrical engineering and magnets**
 - Transformers
 - Switchboards and switchgear
 - Cables
 - Automation
 - Power supplies
 - Magnets



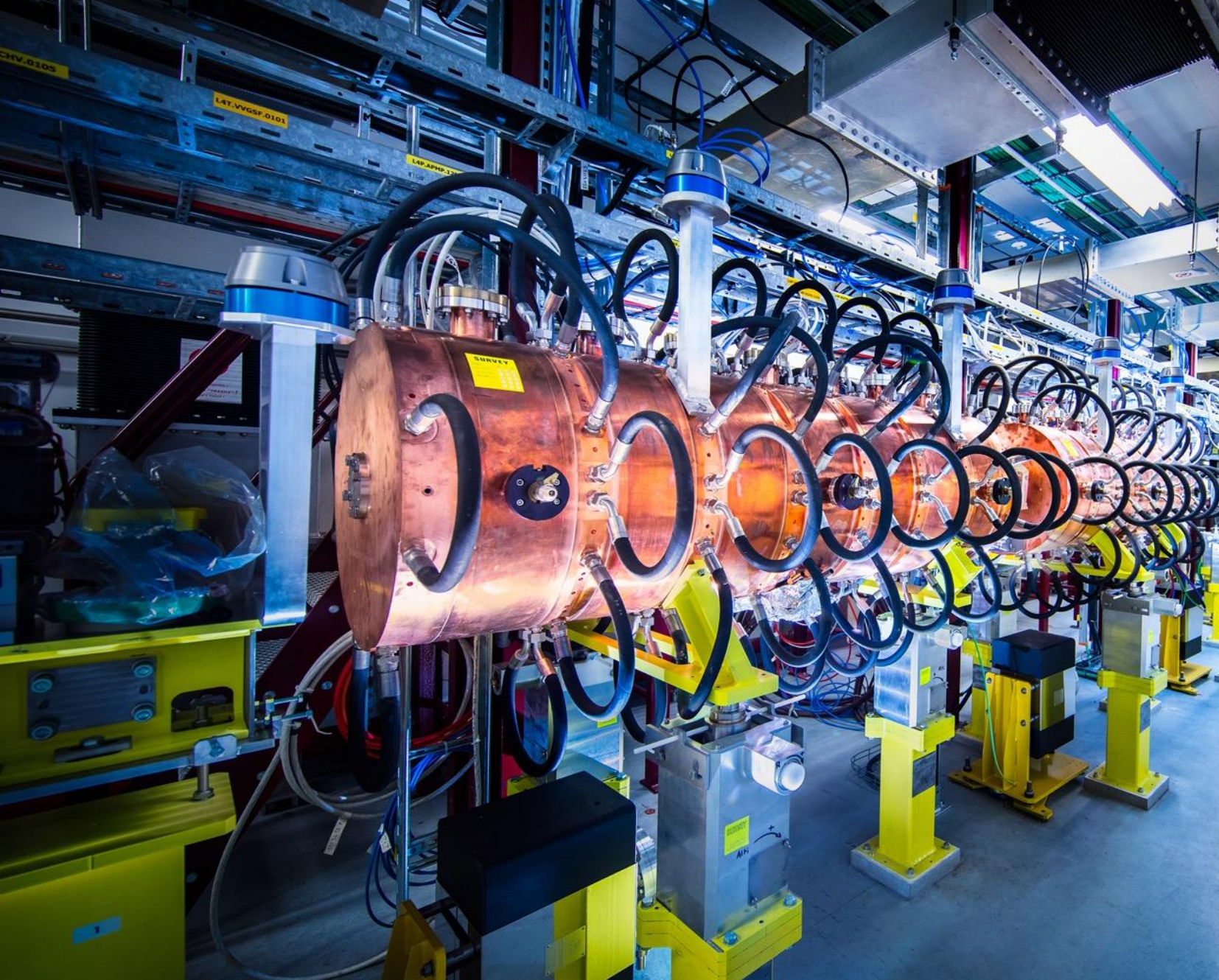
What do we buy:

- **Information Technology**
 - Computing systems
 - Servers
 - Software
 - Network equipment
 - Personal computer equipment



What do we buy?

- **Mechanical engineering and raw materials:**
 - Machining
 - Sheet metal work and arc welding
 - Special fabrication techniques
 - Raw materials, finished and semi-finished products (plates, pipes, etc.)
 - Offsite engineering and testing



What do we buy?

- **Electronics and radiofrequency:**
 - Electronic components (active, passive)
 - PCBs and assembled boards
 - LV and HV power supplies
 - Radiofrequency equipment
 - Amplifiers



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

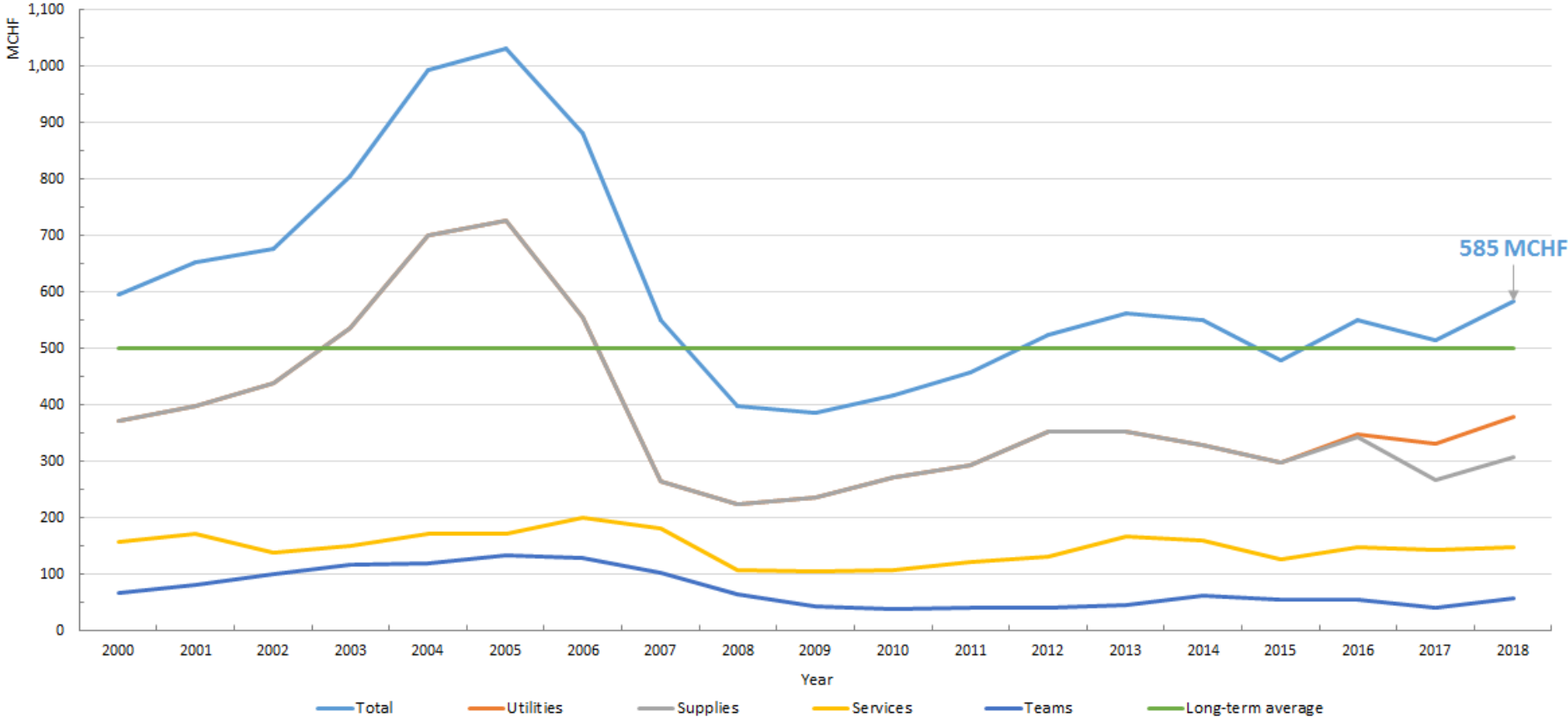
Yearly Budget (contributions 2019)

Country	Percentage of Total	Amount (CHF)	Country	Percentage of Total	Amount (CHF)
 Germany	20.15%	236 015 150	 India*	1.18%	13 811 650
 United Kingdom	15.71%	183 975 700	 Portugal	1.07%	12 488 450
 France	13.69%	160 344 550	 Greece	1.06%	12 453 650
 Italy	10.11%	118 409 050	 Romania	1.02%	11 960 150
 Spain	6.89%	80 685 300	 Czech Republic	0.93%	10 860 850
 Netherlands	4.43%	51 842 200	 Hungary	0.59%	6 965 950
 Switzerland	4.02%	47 115 300	 Turkey*	0.49%	5 692 000
 Poland	2.72%	31 870 000	 Slovakia	0.48%	5 605 900
 Belgium	2.62%	30 692 550	 Bulgaria	0.29%	3 390 550
 Sweden	2.60%	30 459 300	 Serbia	0.22%	2 529 000
 Norway	2.42%	28 343 950	 Pakistan*	0.14%	1 664 200
 Austria	2.11%	24 676 150	 Cyprus**	0.09%	1 000 000
 Denmark	1.75%	20 453 800	 Lithuania*	0.09%	1 000 000
 Israel	1.69%	19 735 200	 Slovenia**	0.09%	1 000 000
 Finland	1.29%	15 129 550	 Ukraine*	0.09%	1 000 000
			Total	100%	1 171 170 100

* Associate Member State ** Associate Member State in the pre-stage to membership

Procurement Expenditure

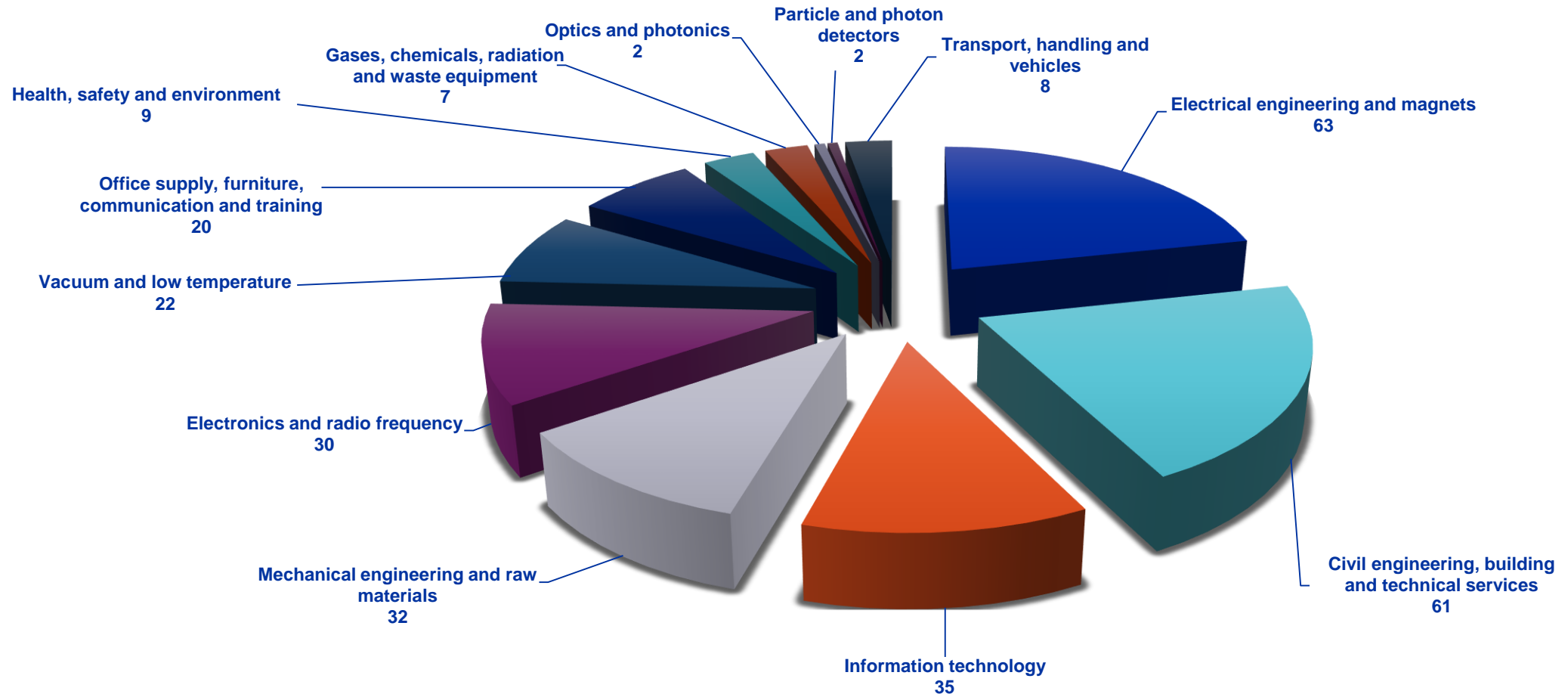
Procurement Expenditure 2000 - 2018



Supplies

(307MCHF spent in 2018 – CERN budget only)

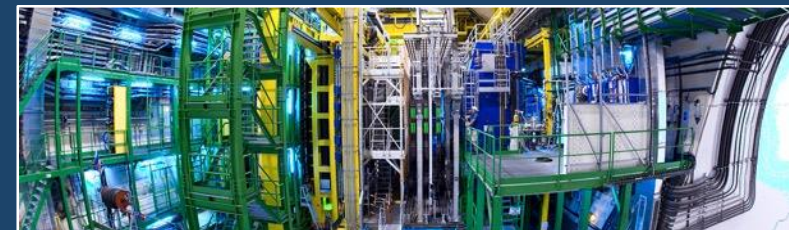
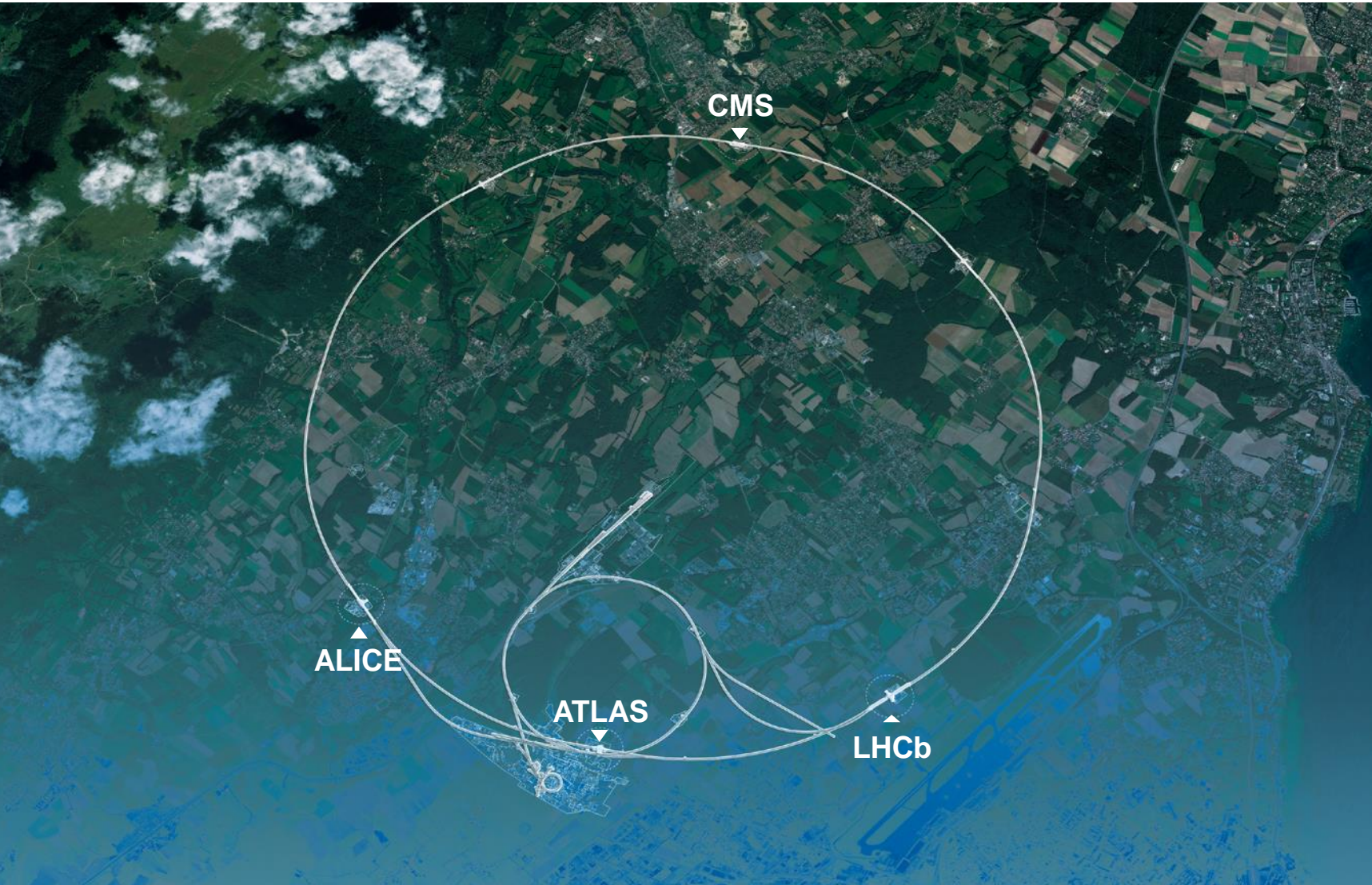
2018 Expenditure of all Member States by Procurement Code Family (MCHF)



Industrial Return (some Dutch suppliers 2019)

Supplier name	City
ELSEVIER (NETHERLANDS)	AMSTERDAM
FMI HIGHTECH SOLUTIONS	UDEN
PM SPECIAL MEASURING SYSTEMS BV	Enschede
DEMACO HOLLAND BV	NOORD SCHARWOUDE
PRYSMIAN GROUP	EINDHOVEN
KUSTERS & BOSCH B.V.	MIERLO
BOSTEC ENGINEERING, LTD.	HEEMSKERK
GEANT ASSOCIATION	AMSTERDAM
DELTA ELEKTRONIKA BV	ZIERIKZEE
ORTEC FINANCE AG	ROTTERDAM
3D IMPACT BV	GELEEN
HOSITRAD HOLLAND BV	Hoewelaken
SURFNET	UTRECHT
VAN HALTEREN METAAL BV	BUNSCHOTEN
VON GAHLEN NEDERLAND	ZEVENAAR
PHOTONIS NETHERLANDS	RODEN
NIKHEF NATIONAL INSTITUUT VOOR KERNFYSICA	AMSTERDAM
KOPANO BV	Delft
PICTURAE	HEILOO
STICHTING INTERNET ARCHIVE	AMSTERDAM

We also buy for the LHC experiments



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 projects for the future of particle physics



Compact Linear Collider (CLIC)

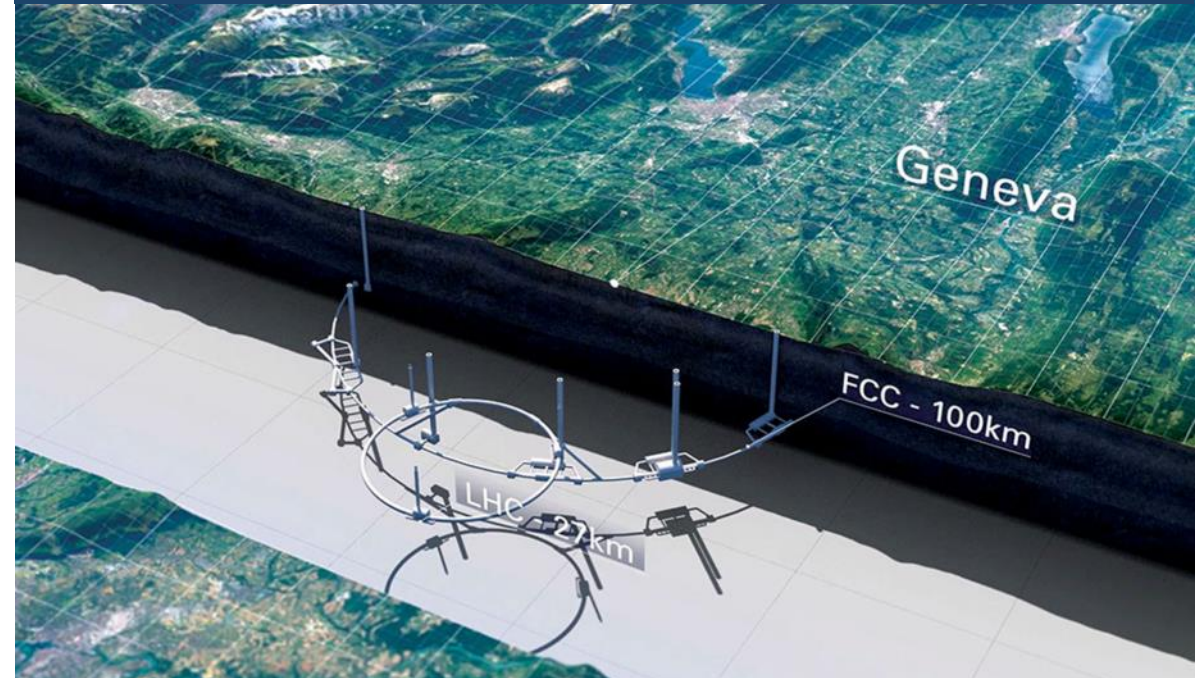


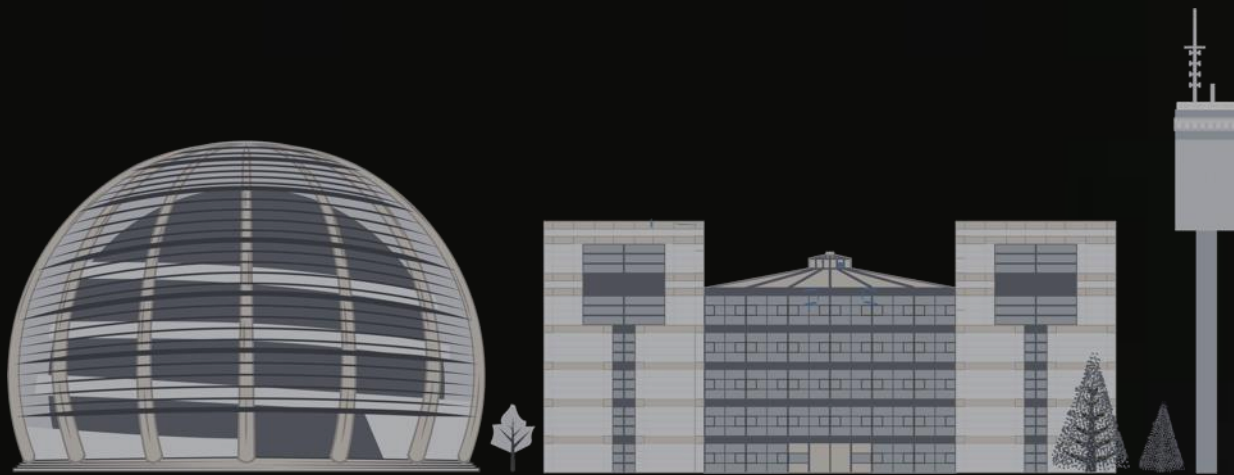
- Linear e^+e^- collider \sqrt{s} up to 3 TeV

Future Circular Collider (FCC)



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





PROCUREMENT @CERN the rules

The Procurement Service

Mission

The Procurement Service 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

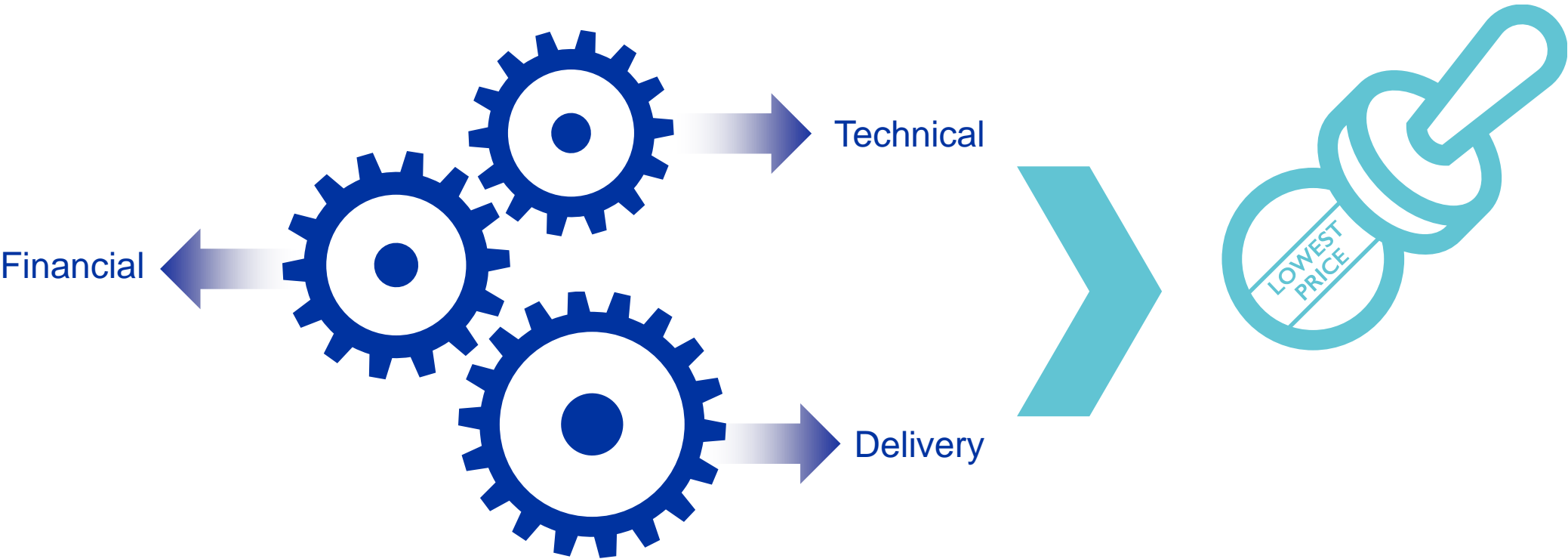
Principles of the Procurement Rules (2/4)

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

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

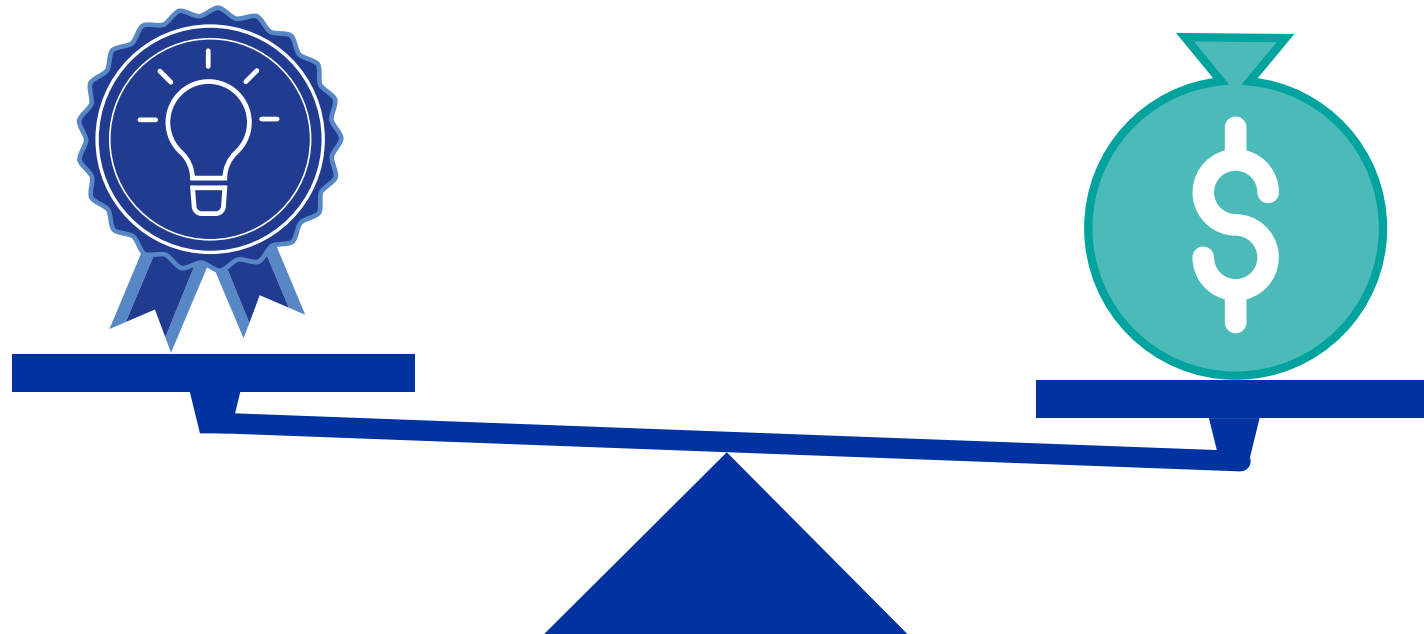
Principles of the Procurement Rules (3/4)

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

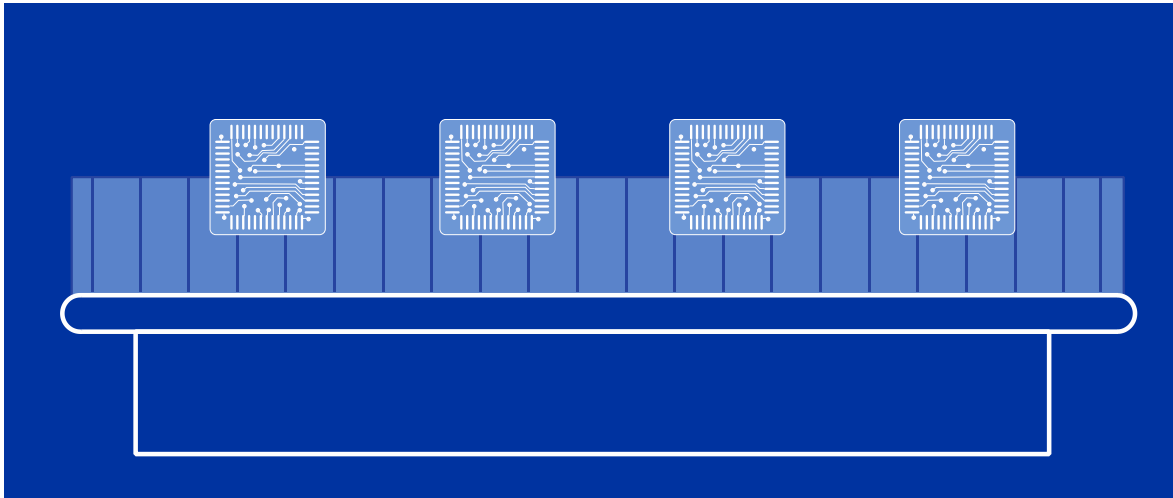


! No alignment rule

How do we buy?

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

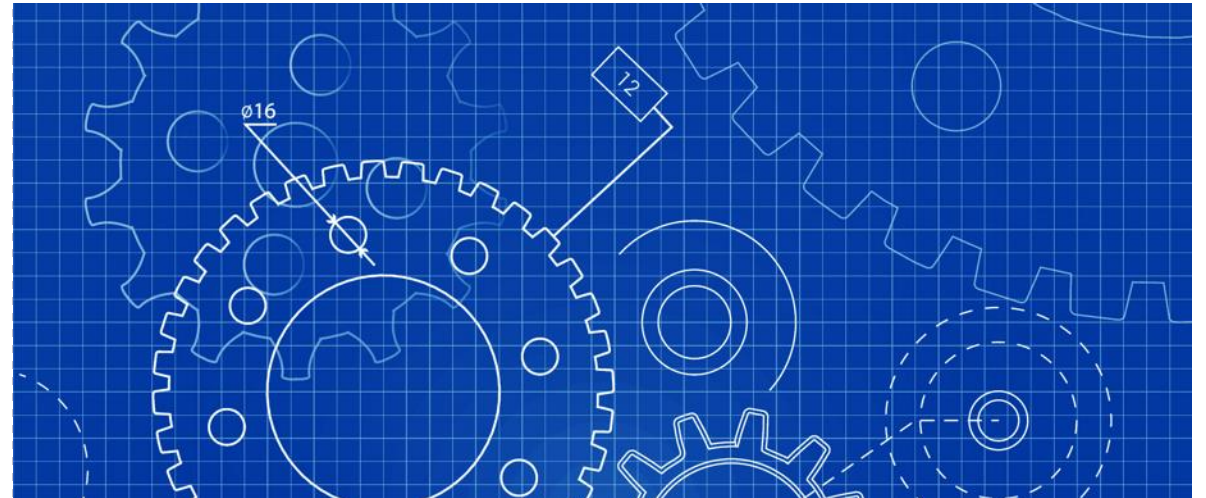
- **Functional specification**



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.



Enquiries between 10'000 and 200'000 CHF

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

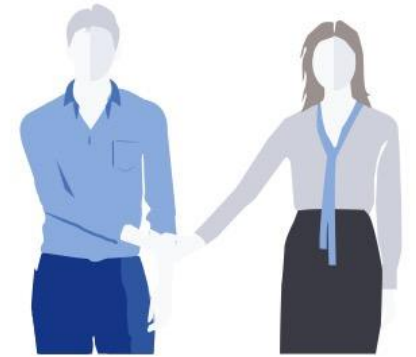
- **Submission deadline: 4 weeks from date of dispatch;**
- **All price enquiries above 50'000 CHF are also sent to the Industrial Liaison Officers (ILOs) for information;**



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 may ask 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.

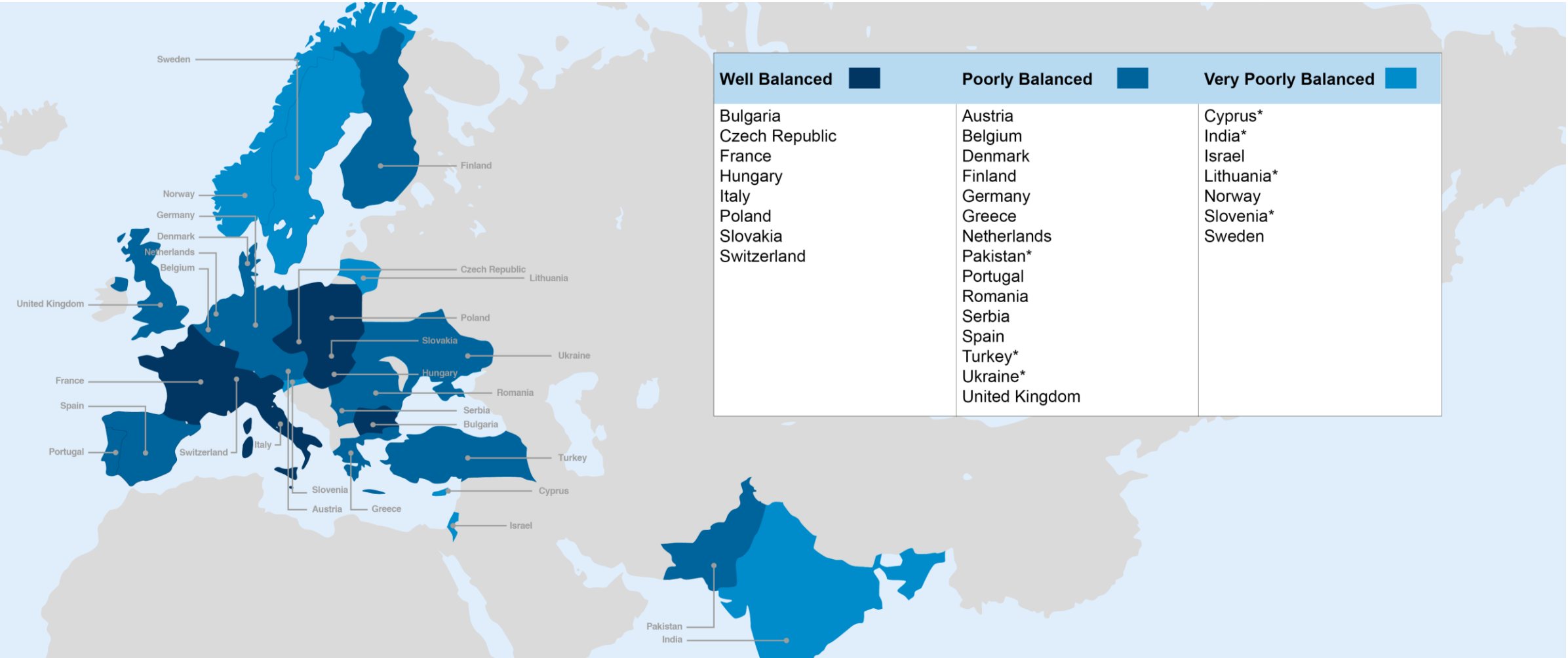
RULE

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.

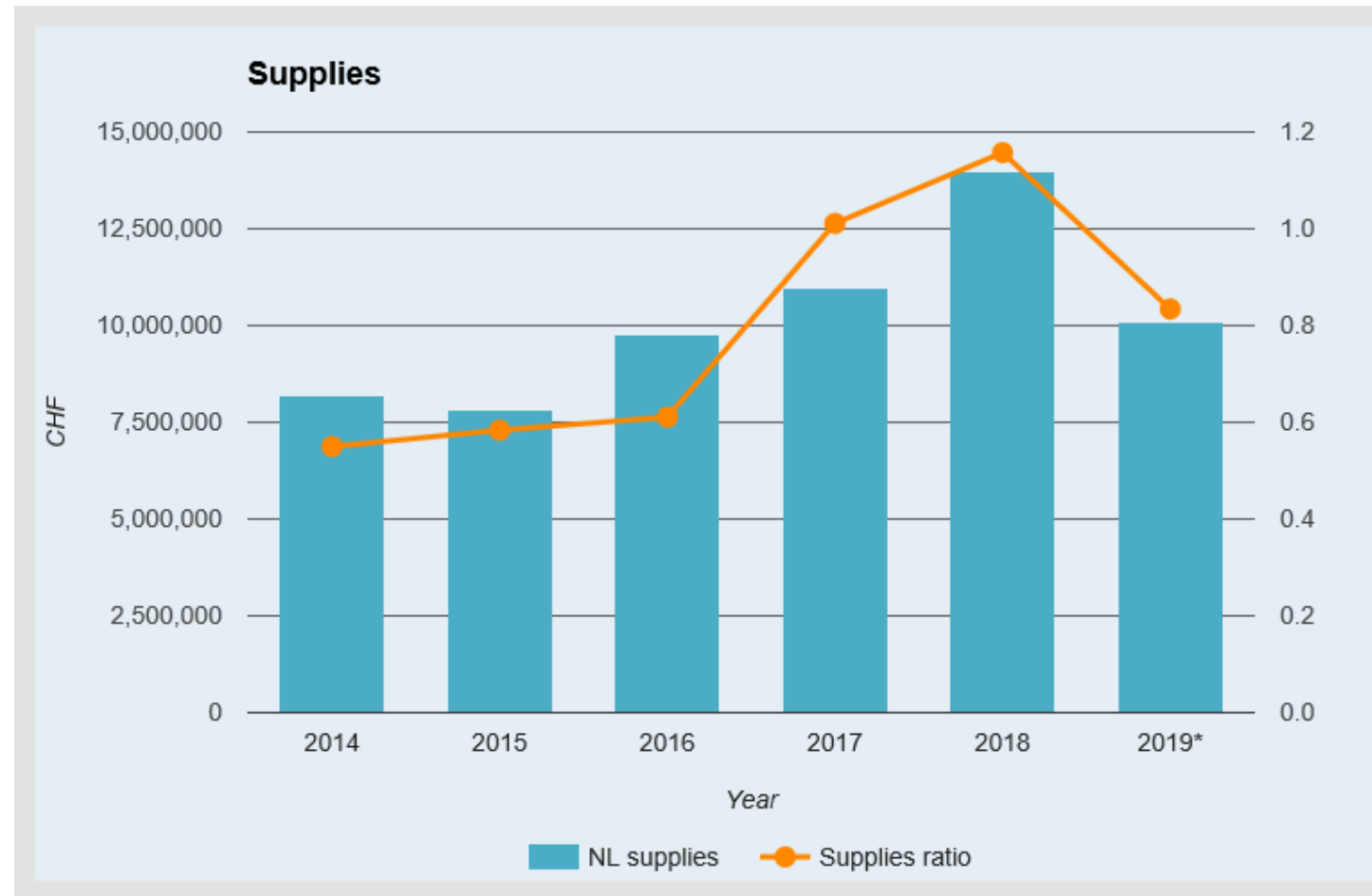
Poorly balanced Member States (Supplies)

(1st March 2019 – 29 February 2020, based on the previous 4 calendar years):



Industrial Return to Netherlands (supplies)

Target = 1.0



* As of 3 June 2019



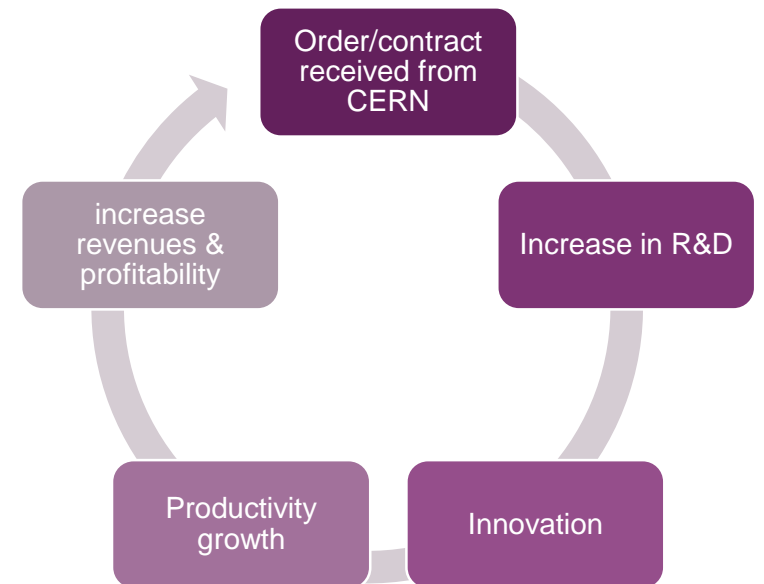
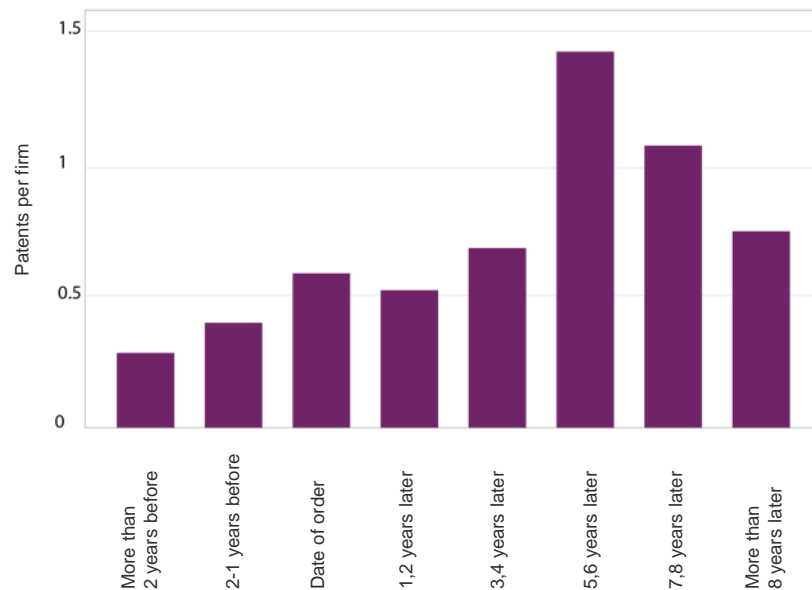
Impact of Doing business with CERN

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%

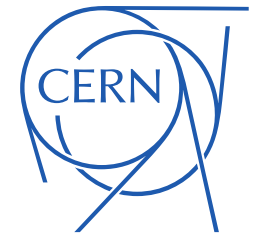
found or opened a new market to
address

62%

used CERN as a marketing reference

Without financial loss.

Doing business with CERN: the facts



Using CERN as a marketing reference improve the reputation as suppliers

supplier

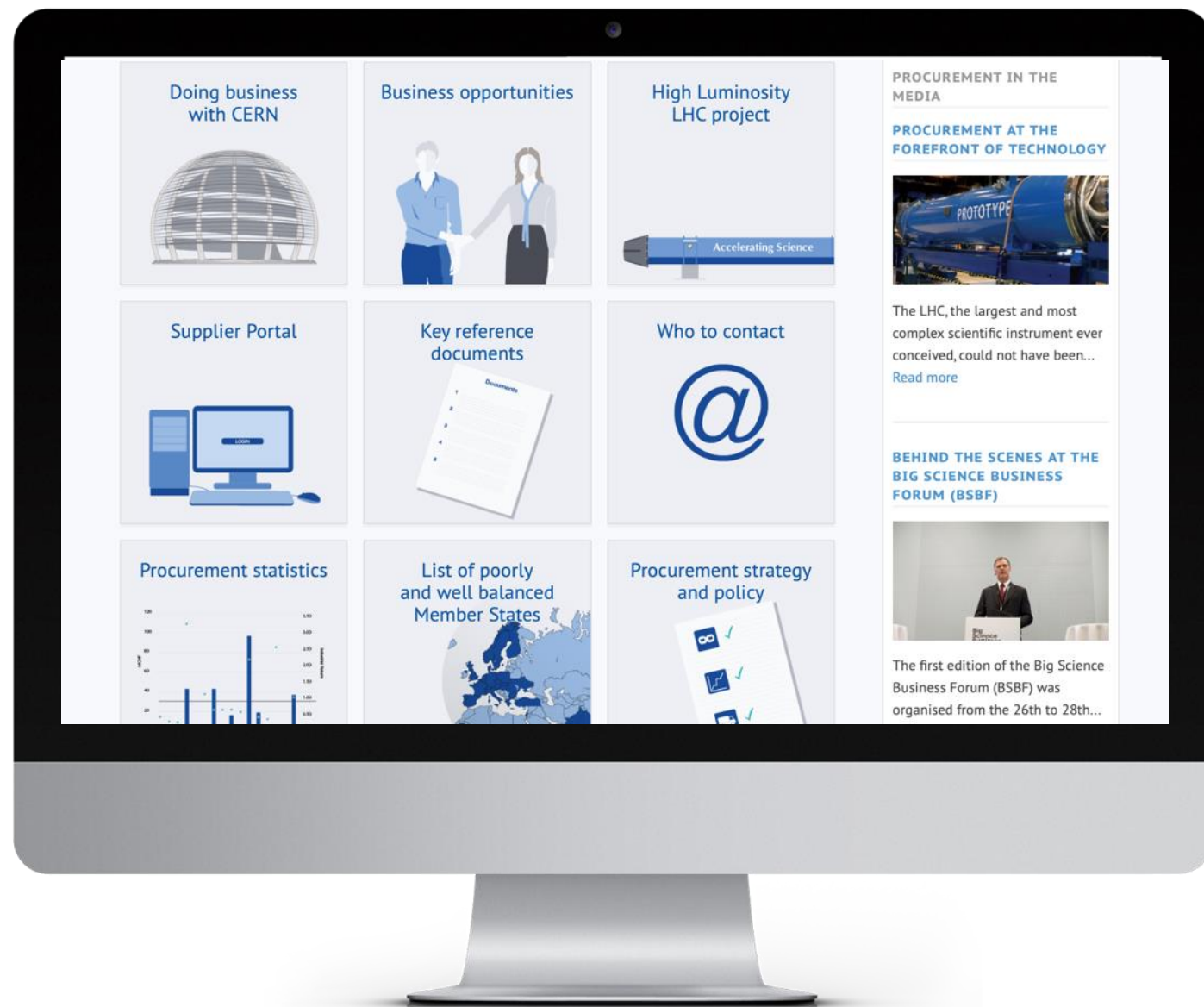




Social Cost-Benefit Analysis (CBA) calculated by the University of Milan

“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.).”

Procurement website



Website of the Procurement Service

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

Procurement and Industrial Services Group
Doing business with CERN

Doing Business with CERN

Doing business with CERN

Doing business with CERN
Procurement Process
Running a contract with CERN
Law applicable to contractors' personnel

Business opportunities

High Luminosity LHC project

Accelerating Science

Supplier Portal

Key reference documents

Who to contact

PROCUREMENT IN THE MEDIA

PROCUREMENT AT THE FOREFRONT OF TECHNOLOGY

The LHC, the largest and most complex scientific instrument ever conceived, could not have been...
Read more

BEHIND THE SCENES AT THE BIG SCIENCE BUSINESS FORUM (BSBF)

The first edition of the Big Science Business Forum (BSBF) was organised from the 26th to 28th...
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more »


More news

DOING BUSINESS WITH CERN

BROCHURE

CERN Shopping List

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


Procurement and Industrial Services Group
[Print View](#)

Forthcoming market surveys and calls for tenders

Advance information on forthcoming market surveys and calls for tenders expected to exceed 200,000 Swiss francs.

In the line entitled Cost Range, a very rough indication of the cost range of the product is given in the form of letters **A, B, C, D**.
A represents items estimated at less than 750 kCHF, **B** represents items between 750 kCHF and 5 MCHF, **C** represents items between 5 MCHF and 10 MCHF and **D** represents items above 10 MCHF.

Firms may reply to the Market Survey published in the table below up to two weeks before the corresponding Invitation to Tender is sent out. Therefore, in case the deadline for replies indicated in the Market Survey cover letter is over, please send your reply to the Market Survey at the earliest possible date.

The countries of origin of supplies and services shall be [CERN Member States](#), except if provided otherwise in the table below.

References marked with "New" have been posted during the last 8 weeks.

Search Menu
Links Menu


Type of Contract: <input type="text" value="All"/>	Market Survey dispatched: <input type="text" value="All"/>
Reference: <input type="text"/>	Call for Tenders scheduled for dispatch: <input type="text" value="All"/>
Activity Code: <input type="text"/>	Description and/or Specific Condition: <input type="text"/>
Requirement: <input type="text"/>	Commercial contact: <input type="text" value="All"/>
Cost Range: <input type="text" value="All"/>	Publication Date: From <input type="text"/> To <input type="text"/> dd-mm-yyyy

Publication Date	Type of Contract	Reference	Requirement (Activity Code)	Description/Specific Condition	Cost Range	Market Survey scheduled for dispatch	Contacts and Interest in being contacted / Market Survey Documents	Invitation to Tender scheduled to dispatch
03-10-2018	Supply	New MS-4489/SMB	Civil-engineering works for the design and construction of new Building 937 situated on CERN's Preveessin site in France. (01020101, 01020102)	CERN intends to place a contract for the design and construction ... Interested firms shall have a proven experience and competence in design ... <input type="button" value="Read More"/>	B	Fourth quarter 2018	To express an interest please send an e-mail to procurement.service@cern.ch Technically: S. Cahuet Commercially: A. Horridge	First quarter 2019
26-09-2018	Supply	New MS-4486/TE/HL-LHC	Supply of 600 bellow expansion joints of 10 different types for HL-LHC (06010100)	CERN intends to place a contract for the supply of ... Interested firms shall have a proven experience and competence in the ... <input type="button" value="Read More"/>	A	Fourth quarter 2018	To express an interest please send an e-mail to procurement.service@cern.ch Technically: Y. Lecerq Commercially: J. Pierlot	First quarter 2019
17-09-2018	Supply	New MS-4470/IT	Framework Market Survey concerning the supply of Desktop PC, Mini-PC and Laptop (portable) PC office computers (04010500, 04010700)	CERN intends to place several contracts for the supply of PCs, ... Interested firms shall have a proven experience and competence in Intel ... <input type="button" value="Read More"/>	B	Third quarter 2018	To express an interest please send an e-mail to procurement.service@cern.ch Technically: G. Metral Commercially: H. Gerster	Fourth quarter 2018
10-09-2018	Supply	New MS-4469/EN	Supply of system interconnections and industrial wiring. (02070300, 03030100, 03030200, 13030500)	CERN intends to place a three years blanket contract for the ... Interested firms or group of firms shall have proven competence, experience ... <input type="button" value="Read More"/>	A	Third quarter 2018	To express an interest please send an e-mail to procurement.service@cern.ch Technically: G. Canale Commercially: N. Azizi	Third quarter 2018

HL-LHC Shopping list

<http://project-hl-lhc-industry.web.cern.ch/content/main-procurement-needs-hl-lhc>

CERN Accelerating science



HL-LHC Industry
Industry Relations and Procurement Website for the HL-LHC project

[Home](#)
[General Info](#)
[Procurement Overview](#)
[Tendering](#)
[Acquisition Timeline](#)
[Events](#)
[Contact](#)

WORK PACKAGES & PROCUREMENT INFO

- WP1 - Project Management & Technical Coordination
- WP2 - Accelerator Physics and Performance
- WP3 - Insertion Regions Magnets
- WP4 - Crab Cavities & RF
- WP5 - Collimation
- WP6A - Cold Powering
- WP6B - Warm Powering
- WP7 - Machine Protection
- WP8 - Collider-Experiment Interface
- WP9 - Cryogenics
- WP10 - Energy Deposition & Absorber Coordination
- WP11 - 11T Dipole
- WP12 - Vacuum
- WP13 - Beam Diagnostics
- WP14 - Beam Transfer & Kickers
- WP15 - Integration & (De-)Installation
- WP16 - Hardware Commissioning
- WP17 - Infrastructure, Logistics and Civil Engineering
- WP18 - Controls Technologies

Main Procurement needs for HL-LHC

The Large Hadron Collider (LHC) is one of the largest scientific instruments ever built. To sustain and extend its discovery potential, the LHC will need a major upgrade in the 2020s. This will increase its luminosity (rate of collisions) by a factor of five beyond the original design value and the integrated luminosity (total collisions created) by a factor ten. The LHC is already a highly complex and exquisitely optimised machine so this upgrade must be carefully conceived and will require about ten years to implement. The new configuration, known as High Luminosity LHC (HL-LHC), will rely on a number of key innovations that push accelerator technology beyond its present limits.

Main Domains of Activity - HL-LHC Project	Work Packages
Cryogenics systems	WP9
Magnets components and assemblies	WP3, WP11
Electrical equipment, electronics & instrumentation	WP4, WP5, WP6A, WP6B, WP7, WP13, WP18
Ultra High vacuum components and systems	WP12
Collimators and new material resistant to high temperatures	WP5, WP8, WP14
Cryostats and subcomponents for cryogenic equipment	WP3, WP4, WP6A, WP9, WP11
High precision assembling and manufacturing technologies	WP4, WP5, WP8, WP12, WP14
Others	WP6A, WP10, WP15, WP16
Raw materials	WP3, WP4, WP5, WP8, WP11, WP12, WP14
Civil engineering and technical infrastructures	WP17

Suppliers must 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.

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.

Netherlands



Mr Jan VISSER

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TEL #2: +31 20 592 2000 (switchboard)

EMAIL: cern-ilo@nikhef.nl

WEBSITE: <http://www.bigscience.nl>

Thank you



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