



# Doing Business with CERN

**Estonian Industry Webinar**

**26 March 2021**

Jérôme Pierlot

*IR Department - Diplomatic and Stakeholder Relations*



# AGENDA

- **Introduction**
  - Legal Framework
  - Budget
  - What we buy
- **Procurement @ CERN**
  - Procurement Service
  - Principles
  - Procedures
- **Procurement website**
- **Forthcoming Tender Opportunities**

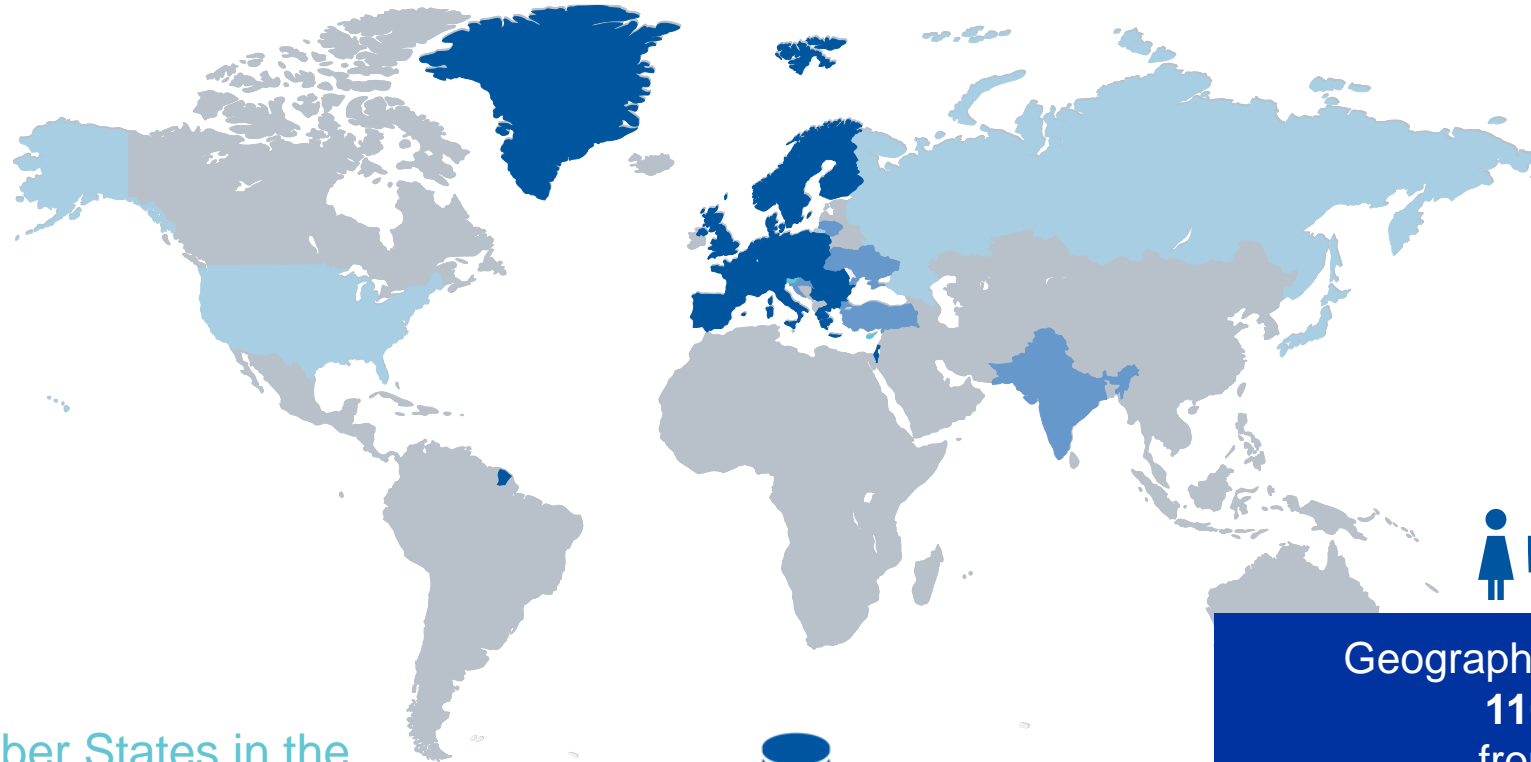
# INTRODUCTION



# Legal Framework

- **CERN, an Intergovernmental Organization**, was established in July 1953, by the “Convention for the establishment of a European Organization for Nuclear Research”;
- As an Intergovernmental Organization, CERN is not a legal entity under national law but **governed by public international law**;
- CERN is therefore entitled to establish its **own internal rules** necessary for its proper functioning, such as the rules under which it **purchases** equipment and services.

# 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 [Estonia]

**6** Associate Member States



**Yearly budget ~ 1200 MCHF**



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

- ~ **2 500** Staff members
- ~ **2 000** Contractors' employees
- ~ **13 000** Physicists / Users

# Yearly Budget (contributions 2021)

Country	Percentage of Total	Amount (CHF)
 Germany	20.35%	243 978 500
 United Kingdom	14.49%	173 742 400
 France	13.57%	162 651 400
 Italy	10.22%	122 471 350
 Spain	7.20%	86 327 950
 Netherlands	4.55%	54 493 050
 Switzerland	3.83%	45 973 250
 Poland	2.76%	33 135 900
 Belgium	2.70%	32 398 200
 Sweden	2.53%	30 272 750
 Norway	2.24%	26 893 400
 Austria	2.15%	25 773 200
 Israel	1.87%	22 390 950
 Denmark	1.75%	21 020 250
 India*	1.35%	16 211 900
 Finland	1.31%	15 669 300

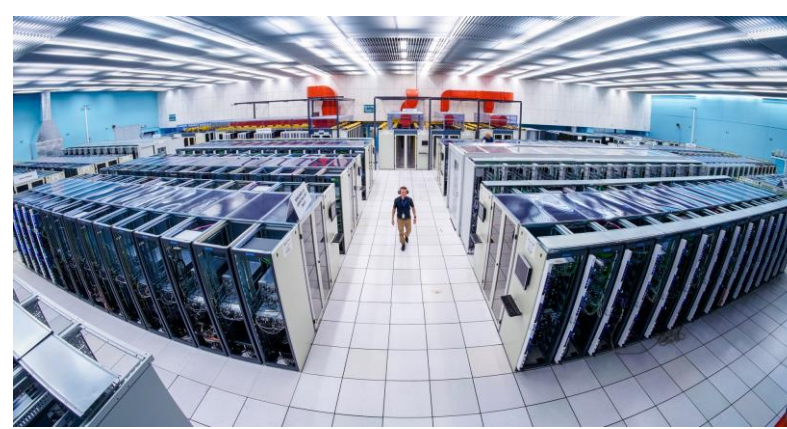
Country	Percentage of Total	Amount (CHF)
 Romania	1.13%	13 586 400
 Portugal	1.08%	12 942 750
 Czech Republic	1.02%	12 274 400
 Greece	1.02%	12 232 750
 Hungary	0.67%	8 029 550
 Slovakia	0.50%	6 010 500
 Turkey*	0.45%	5 349 000
 Bulgaria	0.32%	3 788 250
 Serbia	0.24%	2 865 800
 Pakistan*	0.16%	1 898 100
 Slovenia**	0.12%	1 410 200
 Estonia**	0.09%	1 020 000
 Cyprus**	0.08%	1 000 000
 Croatia*	0.08%	1 000 000
 Lithuania*	0.08%	1 000 000
 Ukraine*	0.08%	1 000 000
<b>Total</b>	<b>100%</b>	<b>1 198 811 450</b>

# What we buy

- **Recurrent supplies & services**
- **Accelerator technologies required for consolidation projects and new developments**

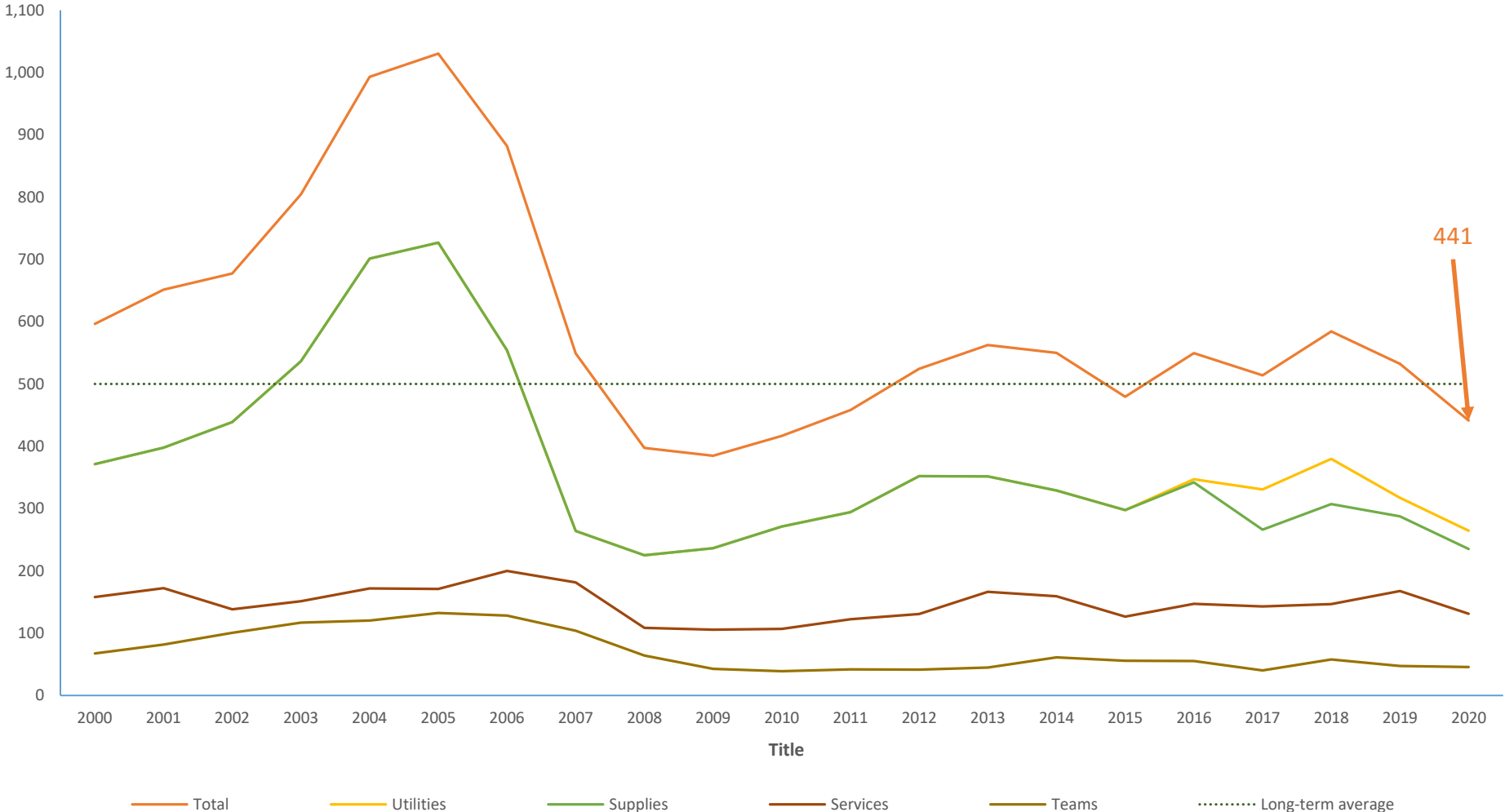
# What we buy

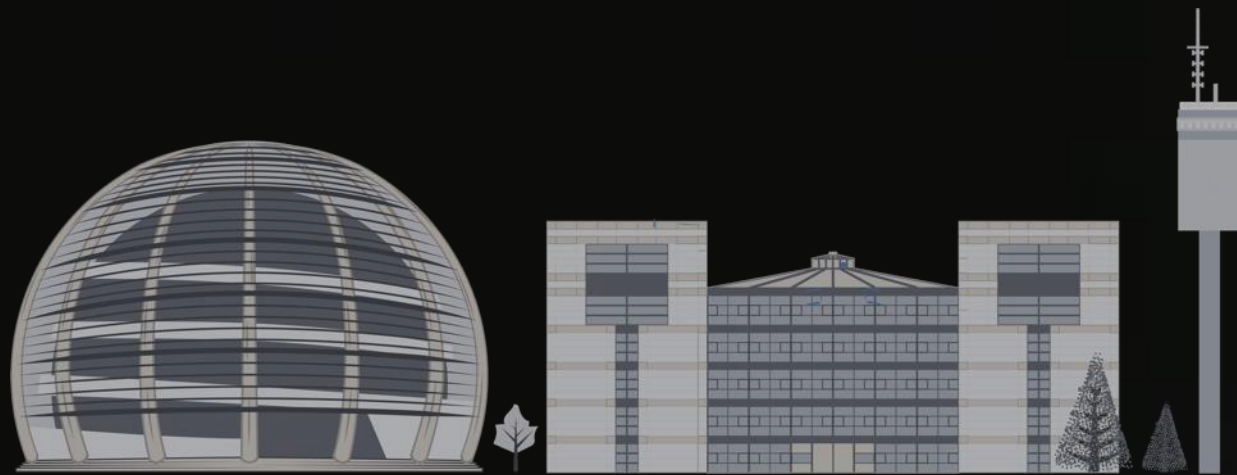
- Civil engineering
- Cooling and ventilation
- Electrical engineering and magnets
- Information Technology
- Mechanical engineering and raw materials
- Electronics and radiofrequency
- Cryogenic and vacuum equipment
- Health and safety equipment,
- Transport and handling equipment
- Office supply, furniture
- Industrial services on the CERN site





# Procurement Expenditure





# PROCUREMENT @CERN

# The Procurement Service

The mission of the Procurement Service is to procure all supplies and services for CERN

**Meeting all requirements:**

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 CERN Procurement Rules

**1**

**Transparency and Impartiality**

**4**

**Selective Tendering Procedure**

**2**

**Limited Tendering**

**5**

**Confidentiality**

**3**

**Objectivity and equal treatment / fair competition**

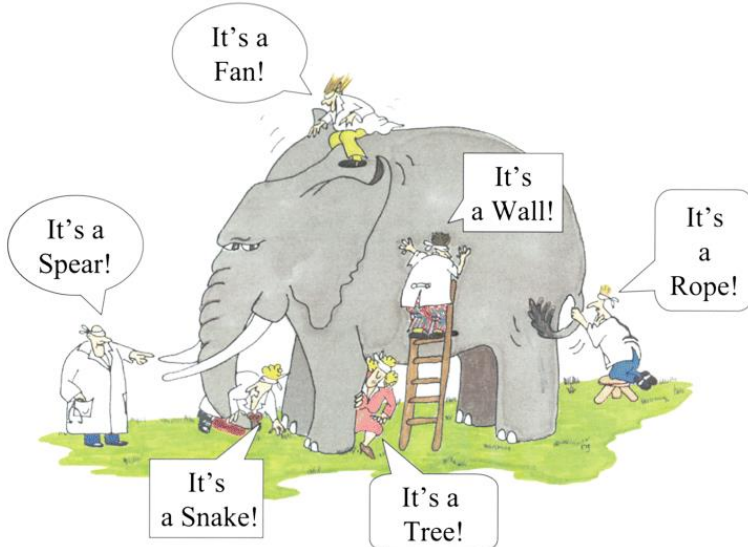
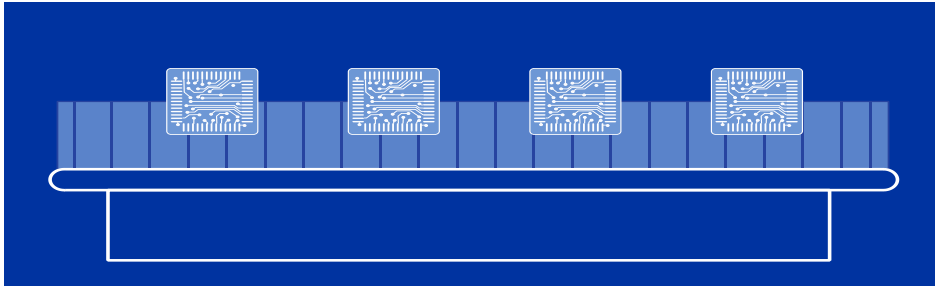
**6**

**Adjudication Basis**

# How do we buy?

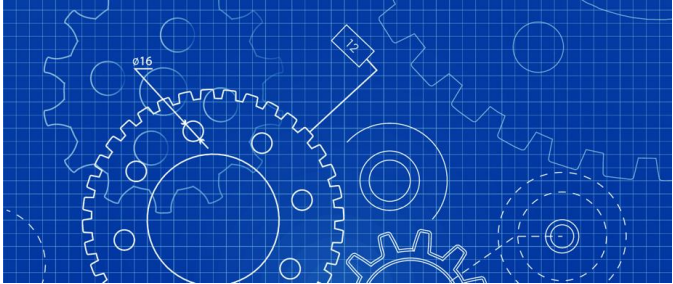
Off-the shelf or non-standard products which can be produced with existing manufacturing techniques or technologies:

- **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.

# 3 Types of Enquiries

## “Price Enquiry” (DO) :

1. Enquiries < 10'000 CHF
2. 10'000 CHF ≤ Enquiries < 200'000 CHF



## “Invitation-to-Tender” (IT) :

3. Enquiries ≥ 200'000 CHF



# Enquiries < 10'000 CHF

## “Price Enquiry” (DO)



- **Price enquiry by Technical Officer or Procurement Officer;**  
(Users may issue enquiries directly provided CERN procurement rules are followed)
- **Minimum of 3 bids requested;**
- **Purchase Order (PO) made to the lowest compliant bidder.**



# 10'000 CHF ≤ Enquiries < 200'000 CHF

## “Price Enquiry” (DO)

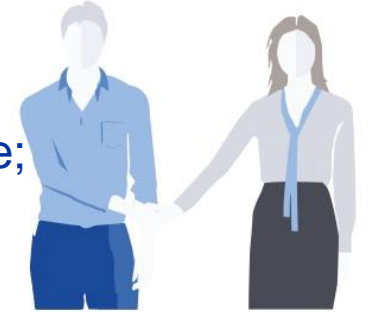
- Price Enquiry prepared / managed by Procurement Officer;
- Technical specification prepared by Technical Officer;
- Submission deadline: 4 weeks from date of dispatch;
- Minimum of 3 bids requested;
- All price enquiries above 50'000 CHF are sent to the Industrial Liaison Officers (ILOs) for information;
- PO made to the lowest compliant bidder.





# Enquiries $\geq$ 200'000 CHF

- **Start-up Meeting + Announcement**
- **Phase 1: MS / “Market Survey”**
  - “Technical Description” + “Qualification Questionnaire” - Specification Committee;
  - Submission deadline: 4 weeks, or more if the MS is still online.
- **Phase 2 : IT / “Invitation-to-Tender”**
  - Tender Form, Technical Specification and all Annexes, Specification Committee;
  - Submission deadline: 4 weeks – Clarification – Bidders Conference as required;
  - Bids shall be submitted via CERN’s e-tendering application.
- **Phase 3 : Opening & Evaluation of the bids**
  - Technical verification, recalculation of unit prices, clarification as necessary;



**Alignment rule applicable?**



# Alignment Rule

## 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.

# 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.

# Industrial Return Coefficient

The Industrial Return Coefficient (IRC) of a Member State is defined as the ratio between that 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.

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

- Well balanced Member States:  $\text{IRC} \geq 1$
- Poorly balanced Member States:  $0.40 \leq \text{IRC} < 1$
- Very Poorly balanced Members States :  $\text{IRC} < 0.40$



# Alignment Rule

## 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.



1

**Supplies Contract only, adjudicated on the Lowest Compliant Basis**

2

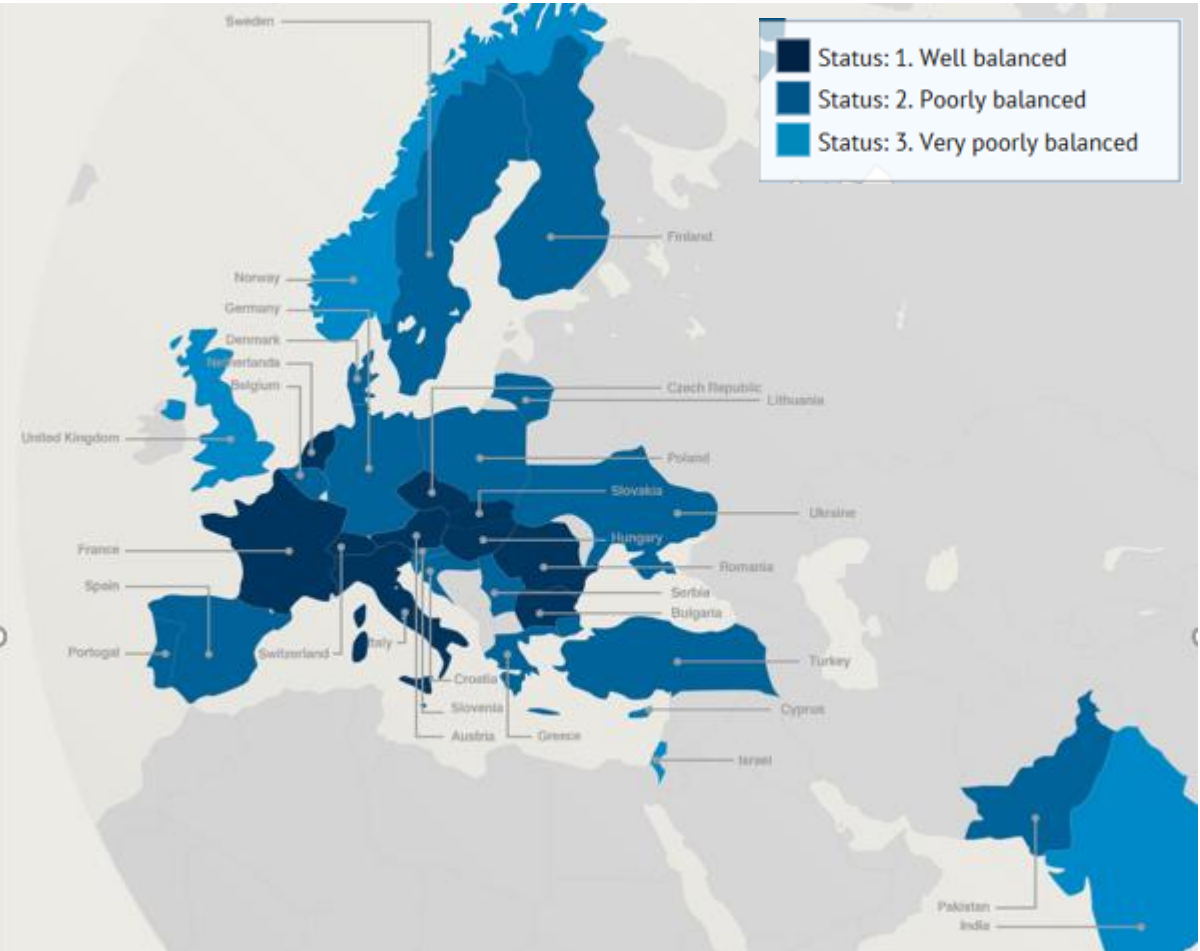
**With a total amount exceeding 100'000 CHF.**

3

**Price difference shall not exceed 20%**

# Member State Balancing (Supplies)

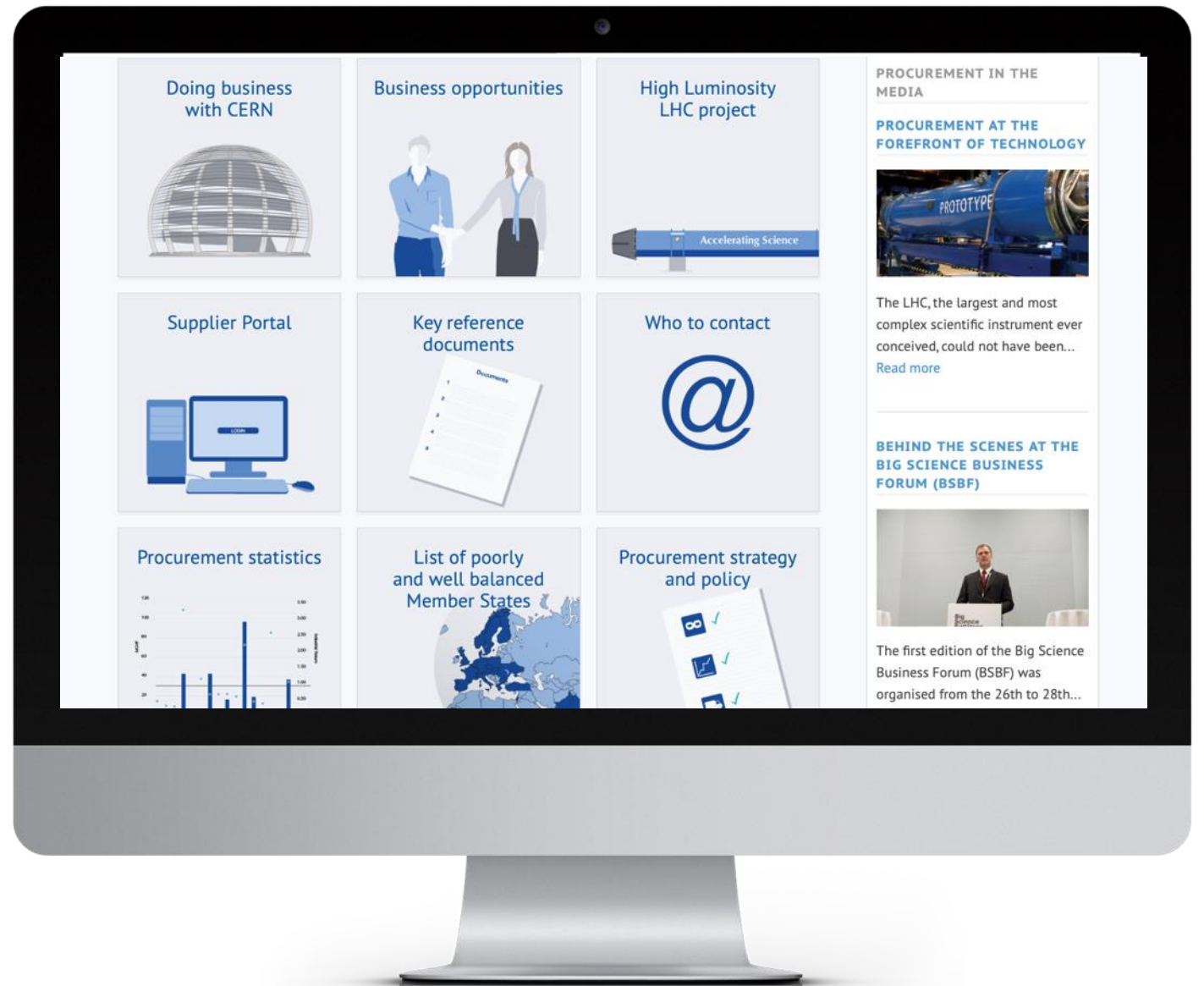
(1st March 2021 – 28 February 2022, based on the previous 4 calendar years):



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

\*Associate Member States

# PROCUREMENT WEBSITE



# Procurement Website

CERN Accelerating science Sign in Direct

Procurement and Industrial Services Group  
Doing business with CERN

DOING BUSINESS WITH CERN

- Doing business with CERN
- Procurement Strategy and Policy
- Code of Professional Ethics Extract
- New Procurement Codes
- Market Surveys and Calls for Tender
- Who to contact at CERN
- Who to contact in your Country
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- Law applicable to contractors' personnel
- Key Reference Documents
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- Procurement Report
- Procurement for HL-LHC Project

INFORMATION FOR CERN USERS, ELO'S AND PROCUREMENT GROUP MEMBERS

Access using your CERN account

<p>Doing business with CERN</p>	<p>Business opportunities</p>	<p>Hi-Luminosity LHC project</p>
<p>Register / Login to CERN e-procurement platform</p>	<p>Key reference documents</p>	<p>Who to contact</p>
Procurement	List of poorly	Procurement

DOING BUSINESS WITH CERN

BROCHURE

VIDEO

RUNNING A CONTRACT WITH CERN

Learn more about CERN contracts

TEMPORARY LABOUR OFFICE

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



# CERN Shopping List

**IPT** 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.

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

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
13-03-2021	Supply	<a href="#">New MS-4672/TE</a>	Supply of a vacuum system for XPS analysis and general surface spectroscopy. (02070100_03500400)	CERN intends to place a contract for the supply of ... Interested firms shall have spectrometers or its separate components, as described ... <input type="button" value="Read More"/>	A	Second quarter 2021	To express an interest please send an e-mail to <a href="mailto:procurement.service@cern.ch">procurement.service@cern.ch</a> Technically: <a href="#">M. Himmerlich</a> Commercially: <a href="#">I. Lobmaier</a>	Second quarter 2021
10-03-2021	Supply	<a href="#">New MS-4680/TE</a>	Supply of 12 Electromechanical DC Circuit Breakers as part of the energy extraction system of three experimental magnets in the North Area. (02030500)	CERN intends to place a Contract for the supply of ... Interested firms shall have proven experience and competence in the design, ... <input type="button" value="Read More"/>	A	First quarter 2021	To express an interest please send an e-mail to <a href="mailto:procurement.service@cern.ch">procurement.service@cern.ch</a> Technically: <a href="#">B. Paney</a> Commercially: <a href="#">N. Aziz</a>	Second quarter 2021
25-02-2021	Supply	<a href="#">New MS-4679/EN</a>	Supply, installation and commissioning of an hydraulic press brake dedicated to high precision forming. (05030200)	CERN intends to place a contract for the supply, installation and ... Interested firms shall have the hydraulic press brake in their standard ... <input type="button" value="Read More"/>	A	Second quarter 2021	To express an interest please send an e-mail to <a href="mailto:procurement.service@cern.ch">procurement.service@cern.ch</a> Technically: <a href="#">D. Murque</a> Commercially: <a href="#">F. Bonthond</a>	Third quarter 2021
25-02-2021	Supply	<a href="#">New MS-4678/SY/HL/LHC</a>	Supply of 36 power converters of ±2000 A and ±10 V for CERN's LHC Hi-Luminosity project. (02100700)	CERN intends to place a contract for the supply of ... Interested firms shall have in-house facilities for the production and testing ... <input type="button" value="Read More"/>	B	Second quarter 2021	To express an interest please send an e-mail to <a href="mailto:procurement.service@cern.ch">procurement.service@cern.ch</a> Technically: <a href="#">V. Herrero Gonzalez</a> Commercially: <a href="#">F. Bonthond</a>	Third quarter 2021
25-02-2021	Services	<a href="#">New MS-4670/IT</a>	Service contract for the network and telecom maintenance on the CERN Site. (13040400)	CERN intends to place a service contract for the network and ... Interested firms shall have competence and experience in network and telecom ... <input type="button" value="Read More"/>	B	Second quarter 2021	To express an interest please send an e-mail to <a href="mailto:procurement.service@cern.ch">procurement.service@cern.ch</a> Technically: <a href="#">A. Pascal</a> Commercially: <a href="#">S. Sonnerat</a>	Second quarter 2021
24-02-2021	Supply	<a href="#">New MS-4675/SCE</a>	Provision of renovation works of the metallic façade and insulation of industrial buildings on the Swiss part of CERN Meyrin site. (01020302)	CERN intends to place a contract for the renovation works of ... Interested firms shall have a proven experience and competence in the ... <input type="button" value="Read More"/>	A		<a href="#">Market Survey documents</a>	Second quarter 2021
24-02-2021	Supply	<a href="#">New MS-4674/SCE</a>	Provision of renovation works of the external windows and doors of industrial buildings on the Swiss part of the CERN Meyrin site. (01020303)	CERN intends to place a contract for the renovation works of ... Interested firms shall have a proven experience and competence in the ... <input type="button" value="Read More"/>	A		<a href="#">Market Survey documents</a>	Second quarter 2021
19-01-2021	Supply	<a href="#">MS-4669/EN/LHC</a>	Supply of a five axis Computer Numerical Control (CNC) milling. (05030100)	CERN intends to place a contract for the supply of ... Interested firms shall have a proven experience and competence in fabrication, ... <input type="button" value="Read More"/>	A	Second quarter 2021	To express an interest please send an e-mail to <a href="mailto:procurement.service@cern.ch">procurement.service@cern.ch</a> Technically: <a href="#">S. Atieh</a> Commercially: <a href="#">F. Bonthond</a>	Third quarter 2021
05-01-2021	Supply	<a href="#">MS-4668/IT</a>	Supply of an Appliance for Quantum Computing Simulation. (04010100_04010300)	CERN intends to place a contract for the supply of ... Interested firms shall have proven experience and competence in the development ... <input type="button" value="Read More"/>	A		<a href="#">Market Survey documents</a>	First quarter 2021

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

# Procurement Website

**Procurement and Industrial Services Group**  
Doing business with CERN

**DOING BUSINESS WITH CERN**

- Doing business with CERN
- Procurement Strategy and Policy
- Code of Professional Ethics Extract
- New Procurement Codes
- Market Surveys and Calls for Tender
- Who to contact at CERN
- Who to contact in your Country
- Register for our Suppliers Database
- Law applicable to contractors' personnel
- Key Reference Documents
- List of poorly and well balanced Member States
- Procurement Report
- Procurement for HL-LHC Project

**INFORMATION FOR CERN USERS, ILO'S AND PROCUREMENT GROUP MEMBERS**

- Access using your CERN account

**DOING BUSINESS WITH CERN**

- Business opportunities
- Hi-Luminosity LHC project

**REGISTER / LOGIN TO CERN e-PROCUREMENT PLATFORM**

**KEY REFERENCE DOCUMENTS**

**WHO TO CONTACT**

**DOING BUSINESS WITH CERN**

**BROCHURE**

**VIDEO**

- DOING BUSINESS WITH CERN

**RUNNING A CONTRACT WITH CERN**

Learn more about CERN contracts

**TEMPORARY LABOUR OFFICE**

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

# Suppliers Database Registration



**CERN e-Procurement**  
Doing business with CERN

Home Help Register

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

**In-tend will be performing a system release on Saturday 7th of September as part of our development release cycle.**  
**The Live Servers will be upgraded at 08:00 BST and will be down until Sunday whilst maintenance is taking place. We apologise about any inconvenience caused.**

**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.



# Suppliers Database Registration

**Firm Information** | Address and Contacts | Procurement Codes | Banking Details

In order to be granted full access to this website you must register your firm/ entity details  
PLEASE NOTE: All fields marked with \* are required

## Firm Type

You are a :

Single Firm        Combination of firms 

## Firm Information

\* Firm Name :        \* Vat Number : 

# 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](mailto:Supplierdb.Support@cern.ch).

[Supplierdb.Support@cern.ch](mailto:Supplierdb.Support@cern.ch).

# Procurement Website

The screenshot shows the CERN Procurement and Industrial Services Group website. The header includes the CERN logo and the text "CERN Accelerating science" and "Procurement and Industrial Services Group". The main content area is divided into several sections:


- Left Sidebar:** "DOING BUSINESS WITH CERN" with links for "Doing business with CERN", "Procurement Strategy and Policy", "Code of Professional Ethics Extract", "New Procurement Codes", "Market Surveys and Calls for Tender", "Who to contact at CERN", "Who to contact in your Country", "Register for our Suppliers Database", "Law applicable to contractors' personnel", "Key Reference Documents", "List of poorly and well balanced Member States", "Procurement Report", and "Procurement for HL-LHC Project". Below this is "INFORMATION FOR CERN USERS, ILO'S AND PROCUREMENT GROUP MEMBERS" with a link for "Access using your CERN account".
- Central Grid:** A 2x3 grid of tiles:
  - Top-left: "Doing business with CERN" with a dome icon.
  - Top-middle: "Business opportunities" with an icon of two people shaking hands.
  - Top-right: "Hi-Luminosity LHC project" with an icon of the LHC and "Accelerating Science".
  - Bottom-left: "Register / Login to CERN e-procurement platform" with a computer icon.
  - Bottom-middle: "Key reference documents" with a document icon.
  - Bottom-right: "Who to contact" with an @ symbol icon.A red arrow points from the "Key reference documents" tile to the "Who to contact" tile.
- Right Sidebar:** "DOING BUSINESS WITH CERN" with a "BROCHURE" section showing a brochure cover, a "VIDEO" section, and "RUNNING A CONTRACT WITH CERN" with a link "Learn more about CERN contracts". At the bottom is "TEMPORARY LABOUR OFFICE".
- Bottom Labels:** Below the grid tiles are labels: "Procurement" under the first tile, "List of poorly" under the second, and "Procurement" under the third.

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

# Contact at CERN

## Procurement Officers:

### Procurement Officer

 **Adam Horridge**

**Role(s)**  
Procurement Officer

**Section**  
Administration and General Infrastructure

**Practice Area**  
Supply contracts

**Experience**  
Adam completed his BSc in Management at Manchester Business School in 2005 and qualified as a chartered member of the Institute of Purchasing and Supply in 2011. Before joining CERN, he managed procurement activity on major engineering construction projects, sourced and executed globally, in both the glass and oil and gas industries. He joined the Procurement Service as a Procurement Officer in August 2014.

**Languages Spoken**  
English French

**Email**  
adam.horridge@cern.ch

**Telephone**  
+41 22 766 3054

 **Merethe Morer-Olafsen**

**Role(s)**  
Procurement Officer

**Section**  
Administration and General Infrastructure

**Experience**  
Merethe arrived at CERN in May 1992. She has gained her experience in various services onsite; HR, TE, DG project office, EN departmental planning office and in organization of conferences. She joined the Section as a procurement officer and as organizer of the CERN Member States Industrial Days events in October 2019.

**Languages Spoken**  
English French Norwegian

**Email**  
Merethe.Olafsen@cern.ch

**Telephone**  
+41 22 76 78568

## Technical Contacts

### Technical Contacts

Search

Activity Area  
- Any -

Apply

### Civil Engineering and Buildings

Activity	Contacts
Civil Engineering and Buildings	Luigi Scibile
Heating and Air-conditioning Equipment	Mauro Nonis
Hoisting and Handling Gear	Ingo Rühl

### Electrical Engineering

Activity	Contacts
Power Supplies and Converters	Jean-Paul Burnet
Switch Gear, Switchboards, Power Transformers and Power Cables	Nicolas Bellegarde
Crates and Low Voltage Power Supplies	Vincent Bobillier, Francois Vasey
Magnets and Superconductors	Luca Bottura

### Electronics


Activity	Contacts
ASIC's and related design tools	Michael Campbell

# Contact for Estonia

## 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.



**Dr Triin Kangro**

**Role**  
CERN Project Manager & ILO

**Organization**  
Trade Development Agency - Enterprise Estonia

**Address**  
Tallinn (Lasnamäe 2)

**Telephone**  
+372 5648 9514

**Email**  
[triin.kangro@eas.ee](mailto:triin.kangro@eas.ee)

**Website**  
<https://www.eas.ee>

ILOs is essential in order to:

- Increase competition in bidding
- Balance Industrial Return
- Raise awareness
- Transmit information to potential suppliers
- Advise CERN about potential suppliers
- Support contractors & suppliers on any general technical, organisational and procedural aspects of CERN;
- Promote registration in suppliers DB
- Encourage long-term participation of industry in CERN's mission



# Any question ?

# Procurement.Service@cern.ch



# Tender opportunities

# Supply of

## 5 Helium Vessels for the Inner Triplet Magnets

Procurement Code: 09.01.05.00

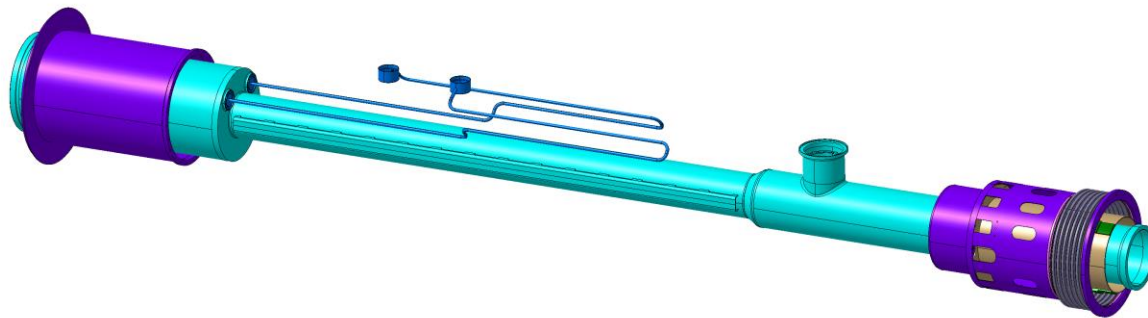
Cost Range : A

Planning: MS: Q2 2021 / IT : Q3 2021

### Description and Specific Condition :

Helium Vessels with a diameter of 0.3 m / Metal sheet work and welding

PED requirements (Pressure Equipment Directive) / Final assembly performed at CERN



## 5 Vacuum Vessels for the Inner Triplet Magnets

Procurement Code: 06.02.02.03

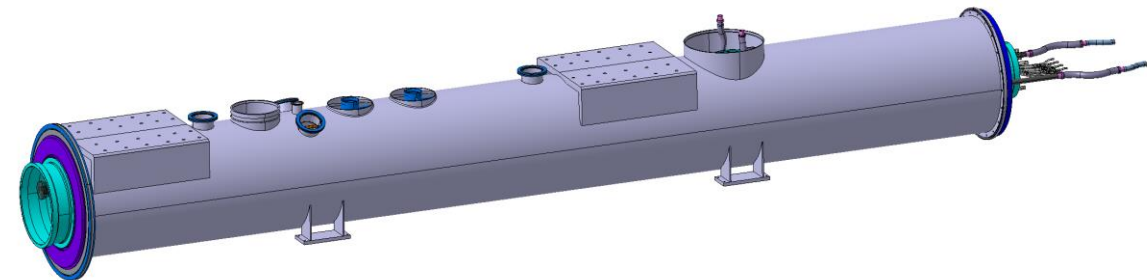
Cost Range : A

Planning: MS: Q2 2021 / IT : Q3 2021

### Description and Specific Condition :

Vacuum Vessels with a diameter of 0. m / Metal sheet work and welding

Vacuum as thermal insulation / Final assembly performed at CERN



**Contact:** [Yann.Leclercq@cern.ch](mailto:Yann.Leclercq@cern.ch)

# Electrical Substation LHC P5 (CMS)

Procurement Code: 02.01.00.00; 02.02.00.00; 02.70.00.00

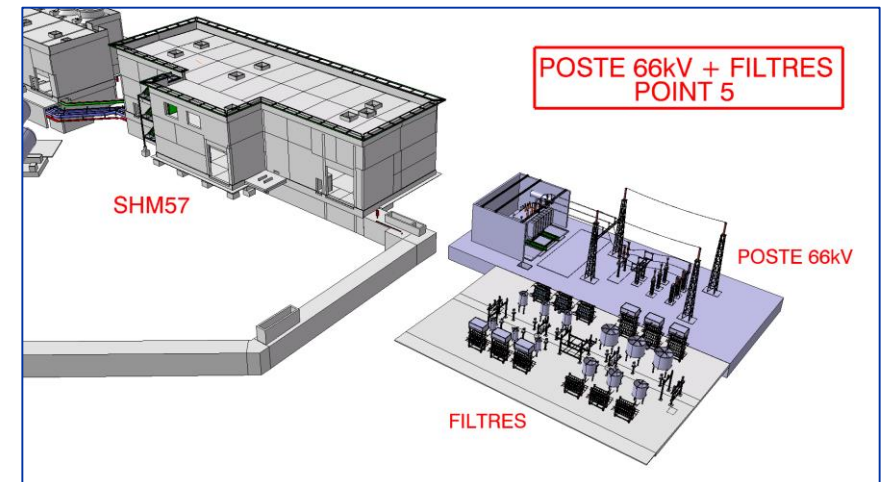
Cost Range : A (Price Enquiry ), C (IT)

Planning: Q2 2021 – Q1 2022

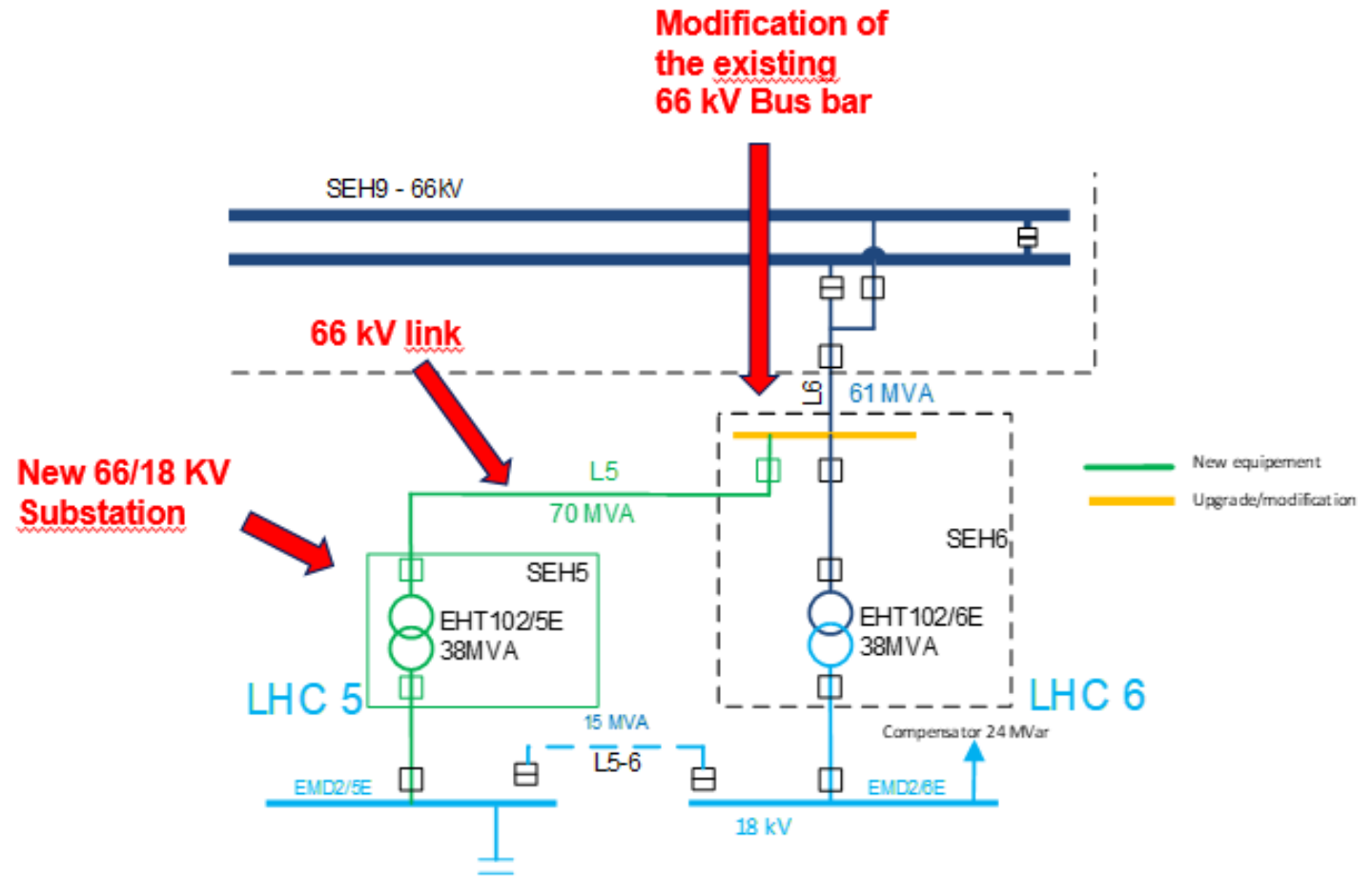
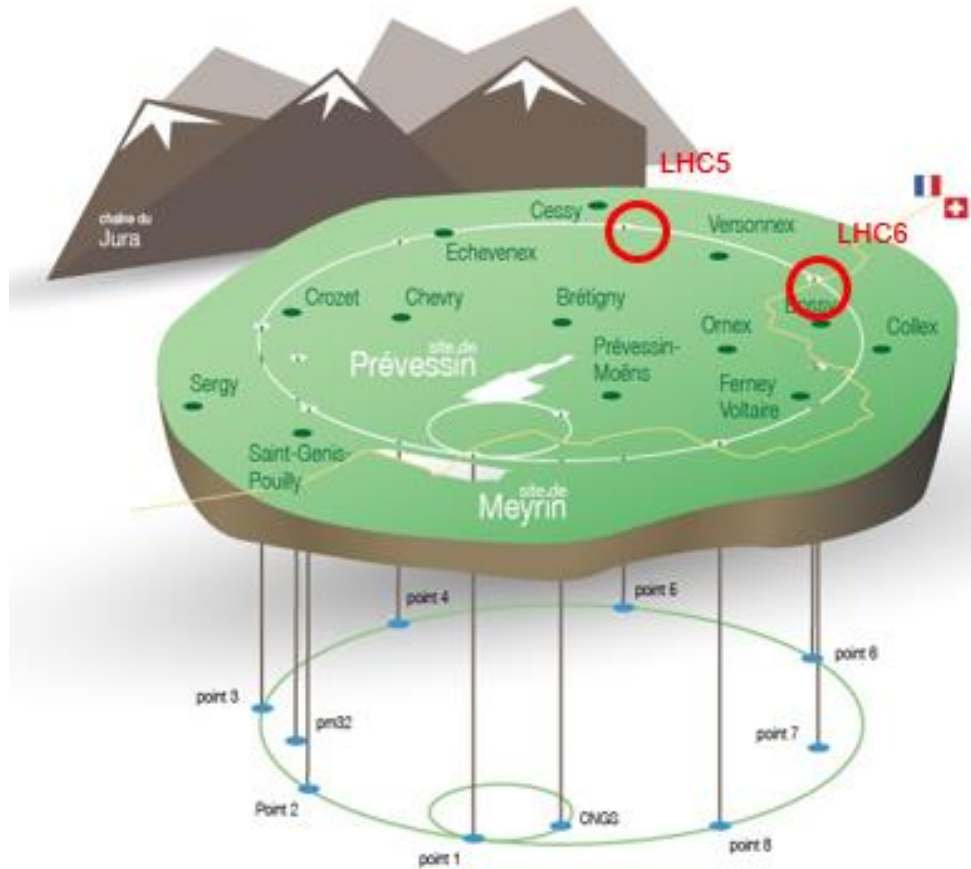
Description and Specific Condition :

- Turnkey Project
- New 66/18 kV electrical substation
- Modification existing 66 kV substation LHC P6
- 38 MVA transformer
- 66 kV link
- French part of CERN

Contact: [stefano.bertolasi@cern.ch](mailto:stefano.bertolasi@cern.ch)



# Electrical Substation LHC P5 (CMS)



# Supply of Power Converters for HL-LHC Project

Procurement Code: 02.10.00.00

Contact: Michele.Martino@cern.ch

Cost Range : A, B

Planning: MS: Q4 2021 / IT: Q3 2022

## Description and Specific Condition :

Low Voltage Power : 657 Power Converters

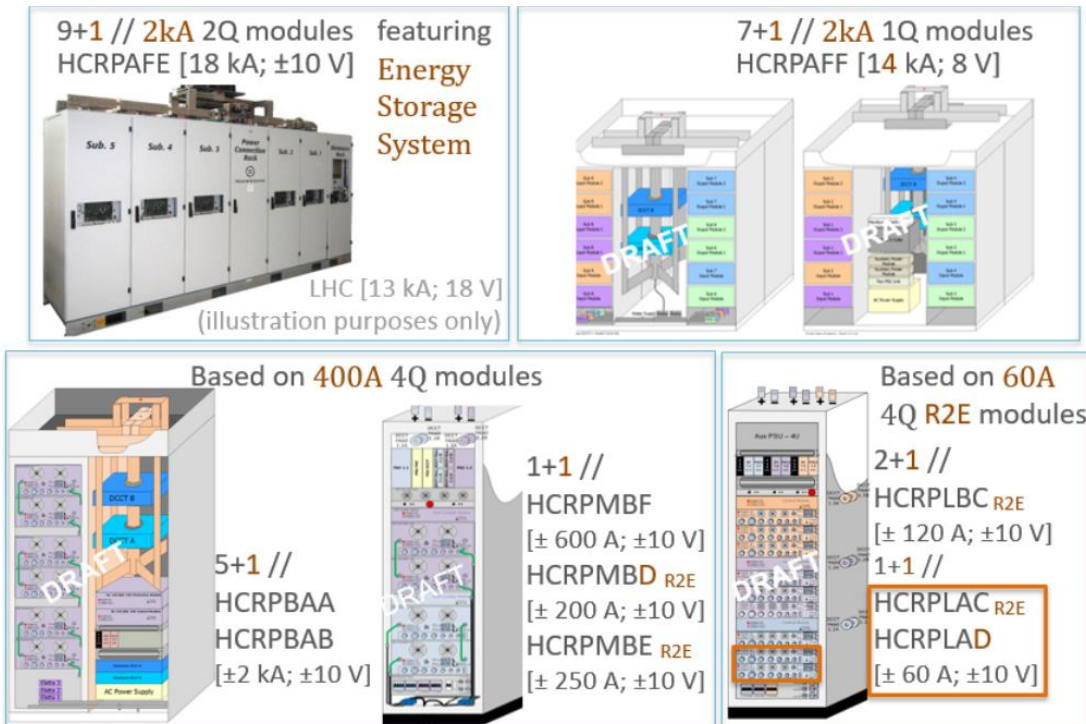
Designed by CERN => Built to print

Very high current: HL-LHC18kA-10V : 6 units + HL-LHC14kA-08V : 10 units

High current: HL-LHC2kA-10V : 37 units

Medium current: HL-LHC600A-10V : 26 units

Low current: R2E-HL-LHC120A-10V : 136 units + R2E-HL-LHC60A-10V : 442 units



# Supply of 600 A & 2 kA Energy Extraction Switches for the String

Contact: [Bozhidar.Panev@cern.ch](mailto:Bozhidar.Panev@cern.ch)

**Procurement Code:** 02.03.05.00

**Cost Range :** A

**Planning:** MS: Q2 2021 / IT: Q2 2022

**Description and Specific Condition :**

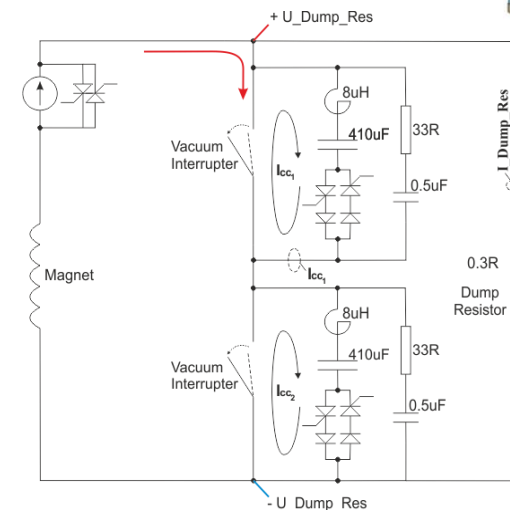
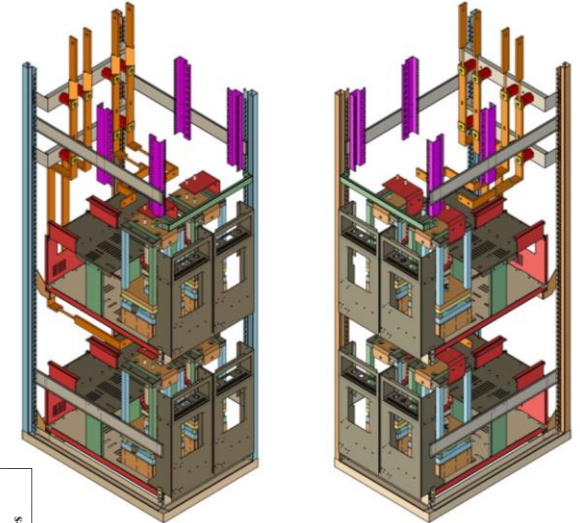
7 units in total : Design, manufacturing and testing of 2 kA and 600 A switches

In-vacuum switches

Energy absorption (150 & 250 kJ)

2 ms whole commutation time

Integrated control system



# Supply of Cryogenic Cables for Beam Position Monitors

Contact: Michal.Krupa@cern.ch

**Procurement Code:** 02.05.05.00

**Cost Range :** A

**Planning:** MS: Q1 2021 / IT: Q3 2021

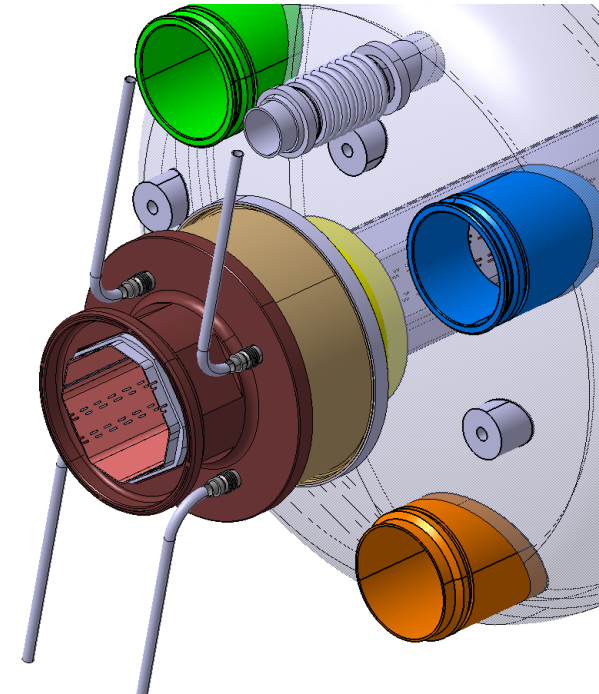
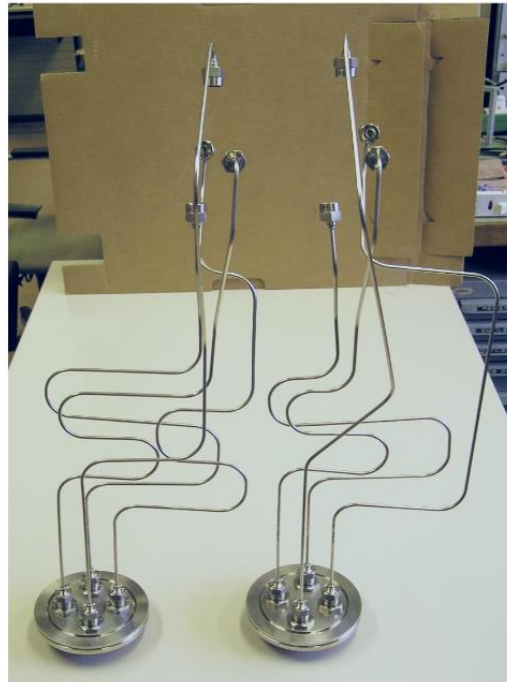
**Description and Specific Condition :**

300 cables needed (proto, series, spares)

Cables to withstand cryogenic temperatures (~ 5K)

SiO<sub>2</sub> Coaxial RF Cables

Laser Welding Cable-Connector challenging. Micro-cracks can't be present





Thank you



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