

# Doing Business with CERN Procurement rules and practical advice

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#### AGENDA

- Introduction
- **Statistics**
- Procurement @ CERN the rules

Impact of Doing business with CERN

**Procurement website** 





# INTRODUCTION







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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:





### Yearly Budget (contributions 2021)

Country	In CHF, 2021 prices	%
Germany	243,978,500	20.4%
United Kingdom	173,742,400	14.5%
France	162,651,400	13.6%
Italy	122,471,350	10.2%
Spain	86,327,950	7.2%
Netherlands	54,493,050	4.5%
Switzerland	45,973,250	3.8%
Poland	33,135,900	2.8%
Belgium	32,398,200	2.7%
Sweden	30,272,750	2.5%
Norway	26,893,400	2.2%
Austria	25,773,200	2.1%
Israel	22,390,950	1.9%
Denmark	21,020,250	1.8%
India*	16,211,900	1.4%
Finland	15,669,300	1.3%
Romania	13,586,400	1.1%

Country	In CHF, 2021 prices	%
Portugal	12,942,750	1.1%
Czech Republic	12,274,400	1.0%
Greece	12,232,750	1.0%
Hungary	8,029,550	0.7%
Slovakia	6,010,500	0.5%
Turkey*	5,349,000	0.4%
Bulgaria	3,788,250	0.3%
Serbia	2,865,800	0.2%
Pakistan*	1,898,100	0.2%
Slovenia*	1,410,200	0.1%
Estonia*	1,020,000	0.1%
Cyprus*	1,000,000	0.1%
Croatia*	1,000,000	0.1%
Lithuania*	1,000,000	0.1%
Ukraine*	1,000,000	0.1%
TOTAL	1,198,811,450	100.0%



# STATISTICS





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### **Procurement Expenditure**





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#### **Civil engineering:**

Construction

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- Renovation of buildings
- Metallic structures
- Earthworks
- Roads
- Cooling and ventilation equipment





- Electical engineering and magnets
  - Transformers
  - Switchboards and switchgear
  - Cables

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- Automation
- Power supplies
- Magnets





#### Information Technology

- Computing systems
- Servers
- Software
- Network equipment
- Personal computer equipment





- 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





# Electronics and radiofrequency:

- Electronic components (active, passive)
- PCBs and assembled boards
- LV and HV power supplies
- Radiofrequency plants
- Amplifiers





#### 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





### **Supplies** (207MCHF spent in 2020 – 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:

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

Build-to-Print specification



Functional specification



# PROCUREMENT @CERN the rules





### **The Procurement Service**

#### **Mission**

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

PS)	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)**



2 Tenders open to Member States only



**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







### 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.)







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# Enquiries exceeding 200'000 CHF (1/2)

#### "Market Survey" (MS)

- Prior announcement in CERN's procurement website, see "<u>Business Opportunities</u>"
  - 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.

#### **SUPPLIES**

SERVICES

"Country(ies) where the **supplies** (including their components and subassemblies) are manufactured or undergo the last major transformation by the contractor or its subcontractor"

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:**





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.



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### Industrial return coefficient

Industrial return coefficient

For Supply contracts and for a 12-month period starting on 1<sup>st</sup> 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".



Over a 4-year period: Very poorly balanced : < 0.40Poorly balanced (PB) :  $0.40 \ge x < 1$ Well balanced (WB):  $\geq 1$ 

Status definition

% expenditure in the MS

Return Coef.= % contribution to CERN budget for this MS



#### **Poorly balanced Member States (Supplies)** (1st March 2021 – 28 February 2022, based on the previous 4 calendar years):

Status: Well balanced Status: Poorly balanced Status: Very poorly balanced	Well Balanced	Poorly Balanced	Very Poorly Balanced
NU FI SE FI FE F	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 Latvia* Norway United Kingdom
	*Associate Member	States	



# 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):





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# **Doing business with CERN: the facts**

Using CERN as a marketing reference improve the reputation as suppliers









supplier

### **Successful Bidders & Contractors**

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





# **Suppliers in Greece (2021)**

SPYRIDON ALEXOPOULOS (ALEXMOLDS)	Perama
ELEKTROMECH	Athens
RENTRON SA	Athens Palaio Faliro
KAMPAKAS SA	Athens
EUROTRADE (EVROEMPORIKI)	Athens
BROS N AXAKALIS AND CO	Neo Ikonio Perama
MORFI MOLDS	Markopoulo Attiki
PRISMA ELECTRONICS SA	Alexandroupol
SAFEDOOR	Kalivia Thorikou
ARISTOTLE UNIVERSITY OF THESSALONIKI	Thessaloniki
G LAOUNAROS AND CO	Athens

GENPRO ELECTRICS ELECTRONICS / M. GKOUZELOU	Athens
DROMEAS SA	Athens
BLIND STUDIO IKE	Thessaloniki
UNIVERSITY OF PATRAS	Patras
KATASKEVASTIKI J DIMITRIOU	Magoula
ELENI THOMAI CHATZICHRISTOU	Athens
INTEGRATED SYSTEMS DEVELOPMENT SA (ISD SA)	Maroussi
EVRYDIKI P. KOSTARAKI	Athens, Attiki
SPANOS	Avlona - Attikis
TEMMA SA	Athens
KORFIATIS ENGINEERING	Piraeus
BOUKIS ATHANASIOS AND GEORGE OE	Attiki
MOSHALIS A.BE.TE	Volos



# Procurement website







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# Website of the Procurement Service

#### http://procurement.web.cern.ch

Procurement and Industrial Services Group	Doing Business with CERN Business Opportunities Supplier Portal	
	) Business Opportunities	) Supplier Portal
) Key Reference Documents	Accelerating Science List of Poorly and Well	Procurement strategy and
r Rey Reference Documents	Balanced Member State	policy



# **CERN Shopping List**

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

	ocure	ment di	nd Industrial Services Gro	up				Print
Forthco	ming n	narket su	rveys and calls for tenders					
dvance informat	tion on forthco	ming market survey	rs and calls for tenders expected to exceed 200,000 Swiss francs.					
			tion of the cost range of the product is given in the form of letters $J$ F, ${f B}$ represents items between 750 kCHF and 5 MCHF, ${f C}$ represents		presents it	ems above 10 MCHF.		
irms may reply t 1arket Survey at			the table below up to two weeks before the corresponding Invitatio	n to Tender is sent out. Therefore, in case the o	deadline fo	r replies indicated in the	Market Survey cover letter is over, please	send your reply to th
he countries of a	origin of suppli	es and services shal	II be <u>CERN Member States</u> , except if provided otherwise in the table	below.				
eferences marke	ed with "New"	have been posted d	uring the last 8 weeks.					
Search Menu	Links	Menu						
Type of Contract	-		rvey dispatched: All V					
Reference:			nders scheduled for dispatch: All					
ctivity Code:		Descriptior	n and/or Specific Condition:					
Requirement:		Commercia	al contact:					
lost Range:		Publication	Date: <u>From</u> <u>To</u>	dd-mm-yyyy				
Search 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 t Tender scheduled t dispatch
03-10-2018	Supply	<u>₩₩ MS-</u> 4489/SMB	Civil-engineering works for the design and construction of new Building 937 situated on CERN2s Prevessin 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	В	Fourth quarter 2018	To express an interest please send an e-mail to <u>procurement.service@cern.ch</u> Technically: <u>S. Cahuet</u> Commercially: <u>A. Horridge</u>	First quarter 20
26-09-2018	Supply	New <u>MS-</u> 4486/TE/HL-LHC	Supply of 600 bellow expansion joints of 10 different types for HL- LHC ( <u>06010100</u> )	CERN intends to place a contract for the supply of Interested firms shall have a proven experience and competence in the	A	Fourth quarter 2018	To express an interest please send an e-mail to <u>procurement.service@cern.ch</u> Technically: <u>Y. Leclercq</u> Commercially: <u>J. Pierlot</u>	First quarter 20
17-09-2018	Supply	New <u>MS-4470/IT</u>	Framework Market Survey concerning the supply of Desktop PC, Mini-PC and Laptop (portable) PC office computers ( <u>04010500</u> , <u>04010700</u> )	CERN intends to place several contracts for the supply of PCs,  Interested firms shall have a proven experience and competence in Intel	в	Third quarter 2018	To express an interest please send an e-mail to <u>procurement.service@cern.ch</u> Technically: <u>G. Metral</u> Commercially: <u>H. Gerster</u>	Fourth quarter 20
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# **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/aspx/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**





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)**





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# **Contact in your country**

#### **ILO: Industrial Liaison Officer**

• Who to contact in Greece

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.

Role Assoc. Prof. University of Ioannina

Organization University Campus - Physics Dept

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# Thank you



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