



www.cern.ch

Doing business with CERN

**Big Science Partner and Industry Day / Kraków, Poland
30 November 2018**

Nordine Azizi

Procurement Officer

Agenda

- **Introduction**
- **What do we buy**
- **Procurement and Industrial Service Group**
 - **Principles**
 - **Procedures and Rules**
- **Contacts**
- **Results of contracts with CERN**

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.**

Legal framework

- **Founded in 1954 :**

12 Member States, “Science for Peace”

Today : 22 Members States, 5 Associate Member States

3 Associated Member States in pre-stage to Membership





























~ 2500 staff, & ~ 1800 other paid personnel

~ 13000 scientific users

Annual Budget ~ 1100 MCHF

Annual Budget

Contributions Overview (for 2017)

Country	Percentage of Total	Amount (CHF)	Country	Percentage of Total	Amount (CHF)
 Germany	20.05%	228 895 300	 Finland	1.32%	15 084 950
 United Kingdom	14.81%	169 060 550	 Greece	1.18%	13 454 050
 France	14.05%	160 369 150	 Portugal	1.09%	12 473 650
 Italy	10.42%	118 976 300	 India*	1.02%	11 589 100
 Spain	7.08%	80 811 550	 Romania	0.97%	11 124 850
 Netherlands	4.68%	53 437 050	 Czech Republic	0.92%	10 495 350
 Switzerland	3.84%	43 859 000	 Hungary	0.59%	6 747 400
 Norway	2.84%	32 440 600	 Slovakia	0.47%	5 416 050
 Poland	2.77%	31 593 150	 Turkey*	0.42%	4 769 750
 Belgium	2.71%	30 964 100	 Bulgaria	0.29%	3 283 900
 Sweden	2.68%	30 619 650	 Serbia**	0.17%	1 935 850
 Austria	2.12%	24 250 100	 Pakistan*	0.13%	1 477 950
 Denmark	1.74%	19 844 650	 Ukraine*	0.09%	1 006 750
 Israel	1.46%	16 698 700	 Cyprus**	0.09%	1 000 000
			Total		1 141 679 450

* Associate Member State ** Pre-stage Associate Member State

Procurement Principles

- CERN purchases supplies and services and awards contracts in compliance with the principles of *transparency* and *impartiality*
- **Limited to firms established in the Member States**
- Invitation to tender documents are drafted in an *objective* way so as to guarantee *fair competition*
- As a rule, CERN's tendering procedure is *selective* and does not take the form of open invitations to tender or price enquiries
- The opening, negotiation and evaluation processes of the bids are *strictly confidential*
- **Award basis:**
 - Is either the lowest; or
 - Represents the best value for money.

Procurement and Industrial Service Group

The mission of the Procurement and Industrial Services group is to:

- procure all supplies and services for CERN;
- meeting all requirements;
- at the lowest possible overall cost, while;
 - achieving balanced industrial return for the CERN Member States, and;
 - respecting the CERN Procurement Rules.

What do we buy @ CERN ?

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

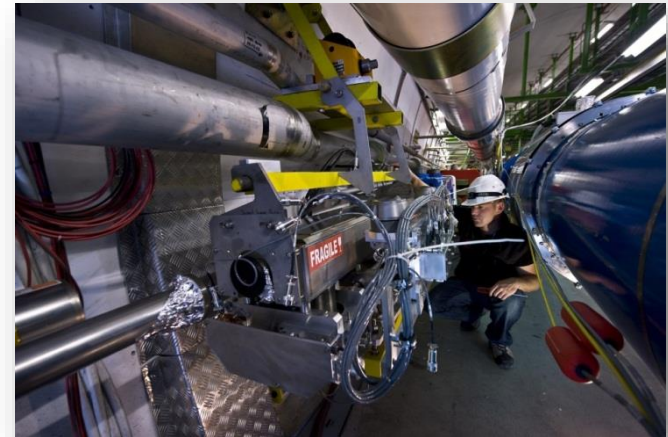
Recurrent supplies & services

- Civil engineering
- Utilities
- Infrastructure & services
- Installation, operation & maintenance
- Data acquisition, computing & networking
- Various supplies



Accelerator Technologies

- Industrial controls & field buses
- Timing & “fast” real-time controls
- Beam collimation
- Beam injection, ejection & dump
- Beam instrumentation & diagnostics
- Radio-frequency equipment
- Power converters
- Permanent and electro-magnets
- Cryogenic equipment
- Vacuum equipment



Standard or non-standard

- **Off-the-shelf /non-standard products**

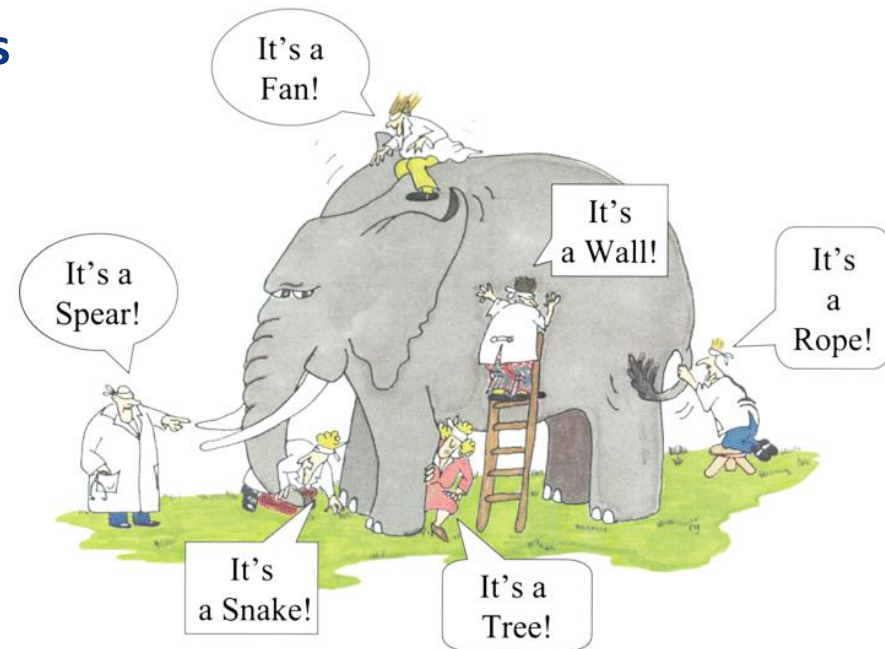
But can be with existing technologies

⇒ functional specification

- **Non-standard products**

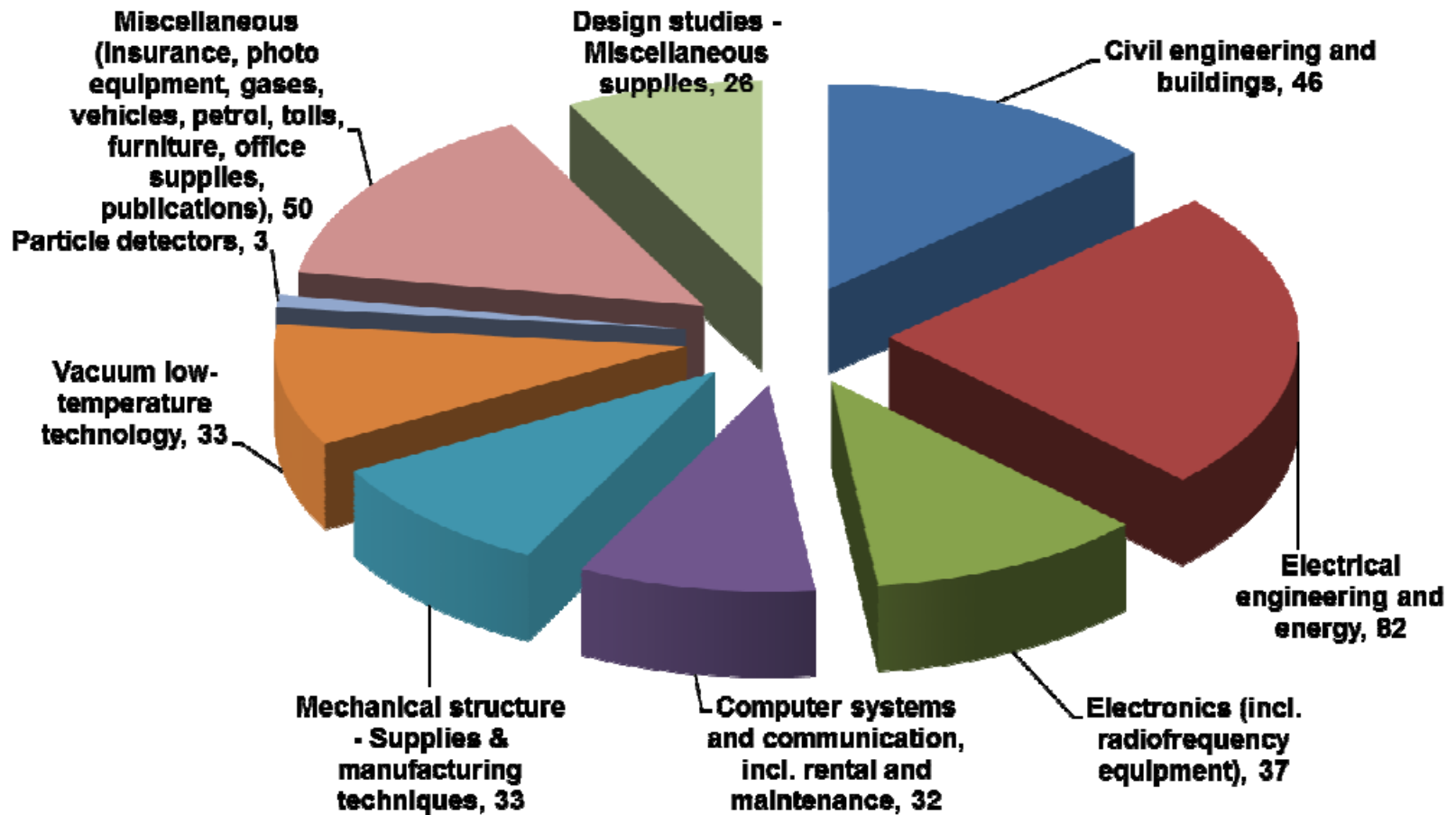
⇒ built to print specification

- ❑ **Prototypes and/or pre-series needed?**

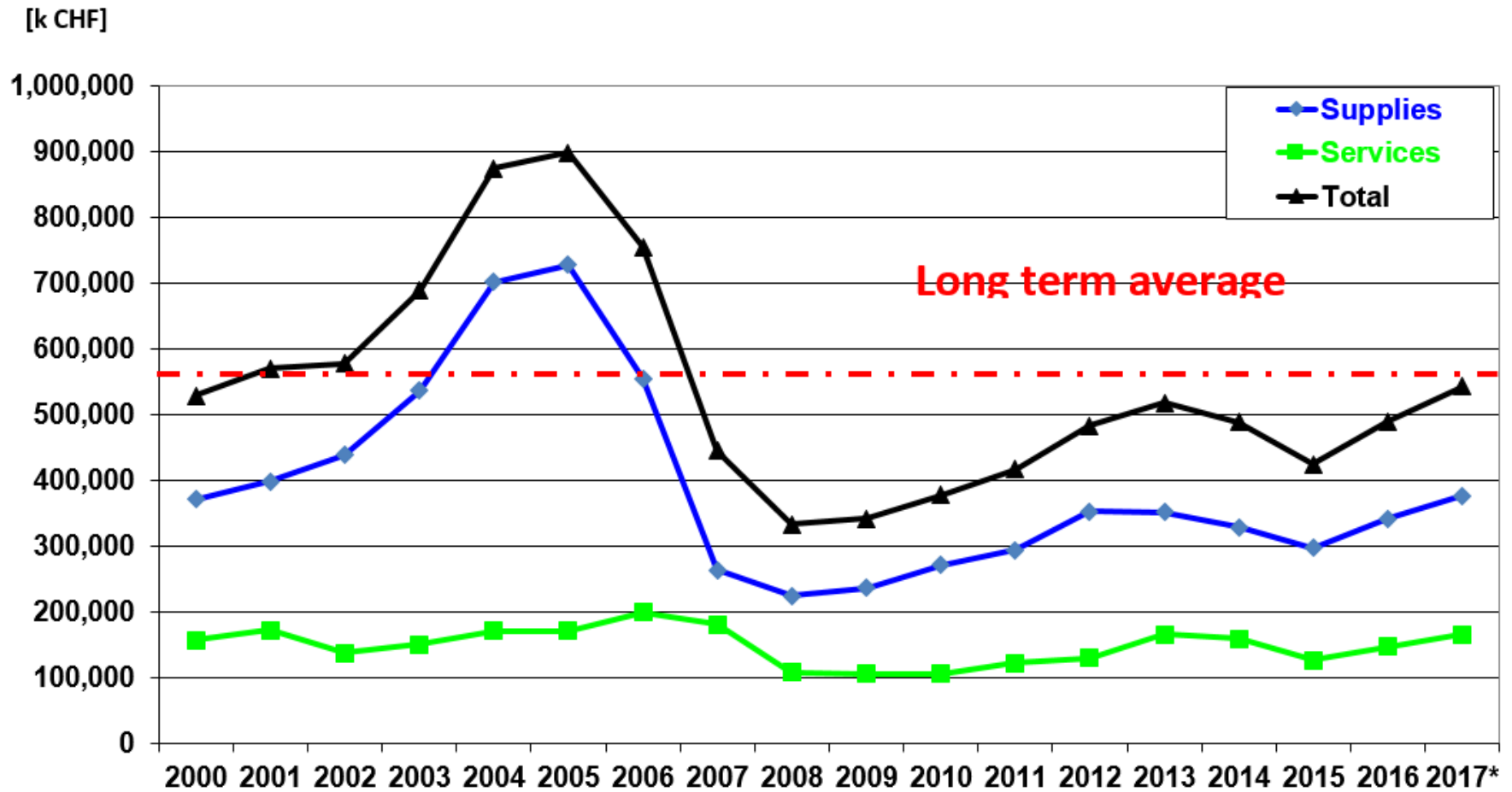


What do we buy @ CERN ?

Supplies for 382 MCHF (2017)



Procurement Expenditures 2000 - 2017



CERN Shopping List

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



[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"/>	<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: <input type="text" value="From"/>	<input type="text" value="To"/>	<input type="text" value="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
02-03-2017	Supply	New MS-4309/EN/HL-LHC	Supply of Nb (Niobium) and NbTi (Niobium Titanium) for HL-LHC Crab Cavities. (05010100)	CERN intends to place a contract for the supply of approximately ... Interested firms shall have all in-house competence, facilities and experience with ... <input type="button" value="Read More"/>	B	First quarter 2017	To express an interest please send an e-mail to procurement.service@cern.ch Technically: C. Zanoni Commercially: J. Pierlot	Second quarter 2017
02-03-2017	Supply	New MS-4308/EN/HL-LHC	Supply of DQW Dressed Cavities. (05040407)	CERN intends to place a contract for the supply of ... Interested firms shall have all in-house facilities, competence and experience with ... <input type="button" value="Read More"/>	B	First quarter 2017	To express an interest please send an e-mail to procurement.service@cern.ch Technically: C. Zanoni Commercially: J. Pierlot	Second quarter 2017
02-03-2017	Supply	New MS-4307/EN/HL-LHC	Supply of Cold Magnetic Shields. (05040407)	CERN intends to place a contract for the supply of ... Interested firms shall have all in-house facilities, competence and experience with ... <input type="button" value="Read More"/>	A	Second quarter 2017	To express an interest please send an e-mail to procurement.service@cern.ch Technically: C. Zanoni Commercially: J. Pierlot of origin	First quarter 2018
01-03-2017 https://www.cern.ch/fp-dep	Supply	New MS-4306/EN/HL-LHC	Supply of HOM couplers and pickups (05040407)	CERN intend to place a contract for the supply 31... Interested firms shall have all in-house facilities, competence and experience with ... <input type="button" value="Read More"/>	B	First quarter 2017	To express an interest please send an e-mail to procurement.service@cern.ch Technically: C. Zanoni Commercially: J. Pierlot	Second quarter 2017



Procedure for obtaining offers

- **Requirements < 10 k CHF**
- **10 k CHF \leq Requirements < 200 k CHF**
- **Requirements \geq 200 k CHF**
 - **Market Survey**
 - **Call for Tender**
 - **Evaluation & Adjudication**

Country of Origin

- Supply contract:

Country(ies) in which the goods are manufactured or where the last major modification will take place.

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

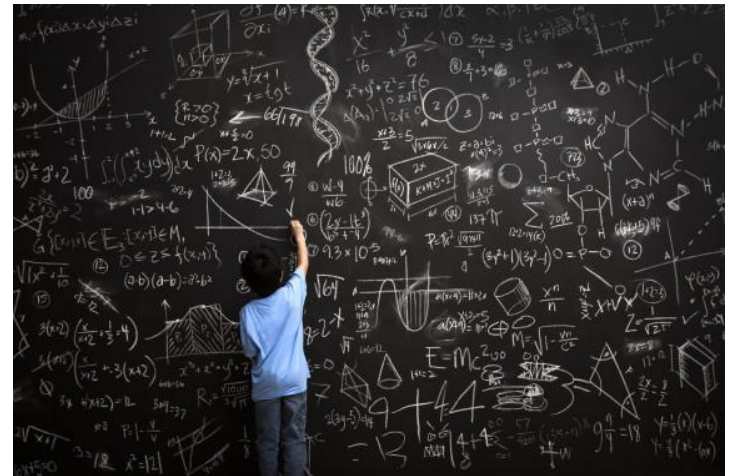
- Service contract:

Country(ies) in which the bidder is established.

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.

- **Well balanced Member States:**
 $IRC \geq 1$
- **Poorly balanced Member States:**
 $0.30 \leq IRC < 1$
- **Very Poorly balanced Members States :**
 $IRC < 0.30$



Industrial Return Coefficient

	CERN Budget		
	Total Contribution	Contribution	
	I	II	III = II/I
	CHF	CHF	%
2012	1,091,804,300	17,747,850	1.63%
2013	1,092,816,950	19,332,550	1.77%
2014	1,103,322,899	17,993,450	1.63%
2015	1,062,202,700	15,166,700	1.43%
2016	1,127,444,450	14,612,200	1.3%
2017*	1,141,679,450	13,454,050	1.18%

Industrial Return Coefficient

Expenditure by Country of Origin		Expenditure for All Countries		IRC
Supplies	Industrial Services	Supplies	Industrial Services	Supplies
VI	VII	IV	V	VIII = (VI/IV) / III
CHF	CHF	CHF	CHF	CHF
3,410,447	361,266	352,236,775	130,558,377	.6 (0.89)
1,571,108	363,112	351,567,741	166,390,502	.25 (0.91)
1,030,171	400,442	329,242,703	159,408,925	.19 (0.91)
1,283,065	416,167	297,504,934	126,378,183	.3 (0.9)
1,554,083	444,987	342,222,700	147,272,122	.35 (0.9)
1,048,083	331,624	257,239,428	120,214,097	.35 (0.9)

The Alignment Rule



- Only for contract paid by CERN budget
- Only for supply contracts
- Only for contracts to be awarded on the lowest compliant bid basis
- Only for contracts exceeding 100'000 CHF in value

A bidder offering goods originating from poorly balanced Member States is offered to align his price, under certain conditions, to that of the lowest bidder and thereby be awarded the contract

The Alignment Rule

Scenario 1:

Lowest bid from a PB MS → **contract placed**



Scenario 2:

Lowest bid from a WB MS

1st bidder (within 20%) from PB MS aligns → **contract placed**



Scenario 2.1:

if not, 2nd lowest bidder (within 20%) from PB MS aligns

→ **contract placed**



Scenario 2.2:

if no alignment, **contract placed** with lowest bidder from WB MS



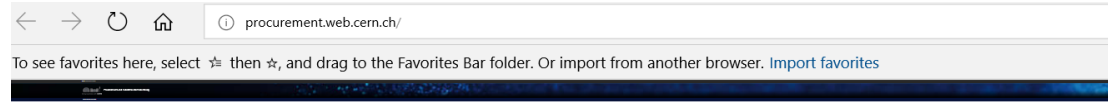
Basis of award

- Supply Contract :

- Lowest compliant**
- Based on FCA price**
- Lowest compliant, butnot lowest cost**

- Takes into account:**
 - **Initial investment**
 - **Energy consumption**
 - **Spares**
 - **Maintenance**
 - **Training, etc.**
 - **Disposal costs**

Doing business with CERN ("3 steps")



Procurement web page :

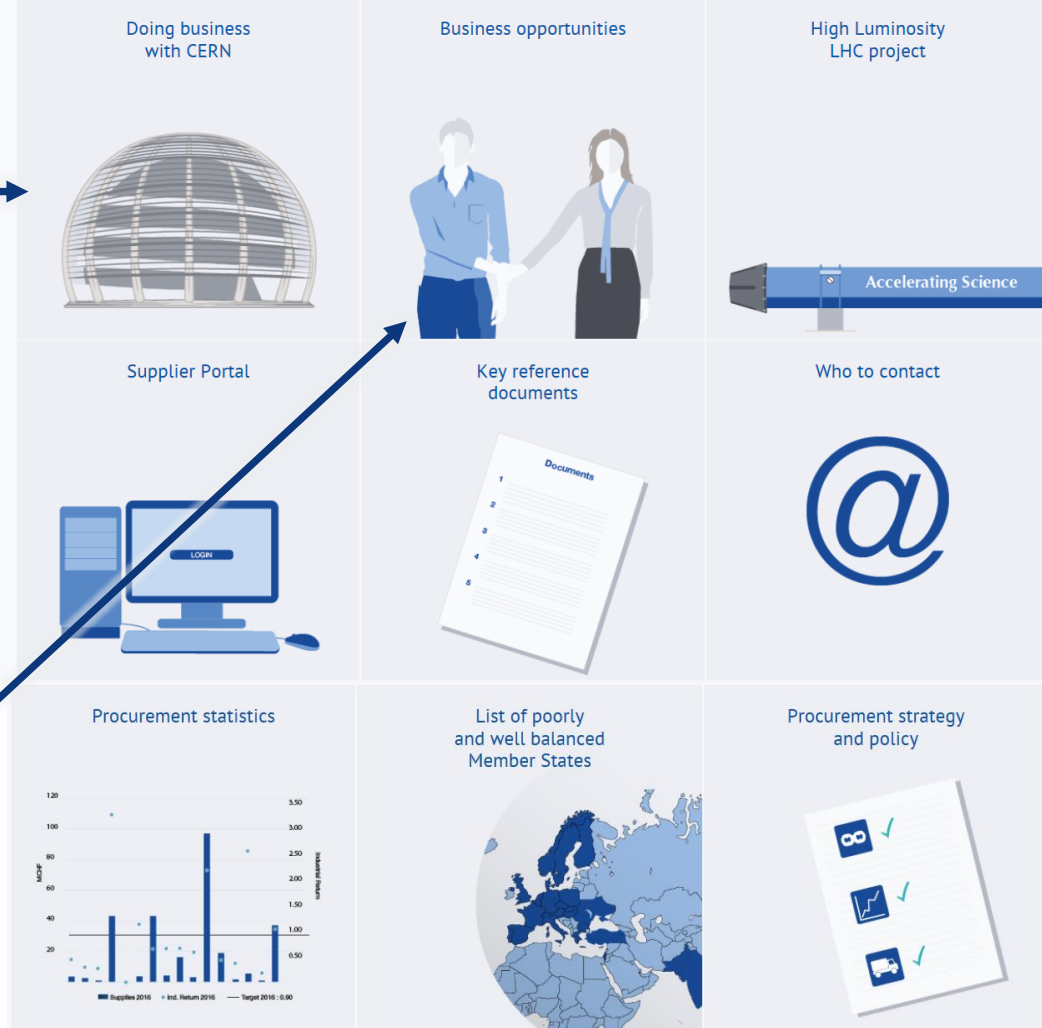
<http://procurement.web.cern.ch/>

1. Register in our supplier dB for the domains which may be interesting for your firm, in order for us to have a possibility to contact you for future requirements:

<http://procurement.web.cern.ch/en/suppliers-portal>

2. Check from time to time CERN's future requirements above 200 kCHF

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



3. Be advised by the ILO Industrial Liaison Officer in your country

- The activities of the ILO consist in:

- informing companies about the opportunities at CERN
- helping and supporting companies to take part
- advising about invitation to tender
- liaising with CERN, procurement and/or technical officer
- informing the procurement office about potential suppliers
- and, providing support to businesses in the event of any difficulty in the interaction with CERN

ILO will meet on regular basis in an ILO forum where they discuss with CERN management any amendments to procurement rules, as well as actions that could improve interaction with industries and improve the balance of the industrial return between Member States.

Industrial Liaison Officer of Poland

<http://procurement.web.cern.ch/en/who-to-contact-in-your-country>

Poland



Mrs. Sylwia WÓJTOWICZ

Wroclaw Technology Park
Muchoborska 18
54-424 Wrocław
POLAND

TEL: +48 781 871 810

EMAIL: sylwia.wojtowicz@technologpark.pl

Successful bidders & contractors

- **100 % of the successful bidders have made an offer !**
- **Often small – medium sized and flexible firms**
- **Ensure full understanding of specifications**
 - Exceeded specifications will be too expensive
 - Take into consideration test and documentations costs
- **Make best offer directly**
- **Communicate with CERN (problems, issues, alternatives, etc.)**
- **Ensure good working relationship with partners and sub-contractors**

Result of contracts with CERN

- ✓ 17% have opened a new market
- ✓ 38% have developed new products
- ✓ 42% have increased international exposure
- ✓ 44% have improved technological learning
- ✓ 52% would have had poorer sales performance
- ✓ 60% have acquired new customers



All firms had derived great value from CERN as a marketing reference



Thank You!
Dziękuję Ci!





www.cern.ch