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# Doing business with CERN

**Belgium @ CERN**  
**19 & 20 March 2019**

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*Head of Procurement for Accelerators & Technology Section*

A 3D rendering of the Belgian flag (black, yellow, and red vertical stripes) waving, serving as a background for the title text.

# CERN and Belgian Industries

# 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**








**~ 2500 staff, & ~ 1800 other paid personnel**
















**~ 13000 scientific users**

**Annual Budget ~ 1100 MCHF**

# Annual Budget

## Contribution overview for 2019

Country	Percentage of Total	Amount (CHF)
 Germany	20.15%	236 015 150
 United Kingdom	15.71%	183 975 700
 France	13.69%	160 344 550
 Italy	10.11%	118 409 050
 Spain	6.89%	80 685 300
 Netherlands	4.43%	51 842 200
 Switzerland	4.02%	47 115 300
 Poland	2.72%	31 870 000
 Belgium	2.62%	30 692 550
 Sweden	2.60%	30 459 300
 Norway	2.42%	28 343 950
 Austria	2.11%	24 676 150
 Denmark	1.75%	20 453 800
 Israel	1.69%	19 735 200
 Finland	1.29%	15 129 550

Country	Percentage of Total	Amount (CHF)
 India*	1.18%	13 811 650
 Portugal	1.07%	12 488 450
 Greece	1.06%	12 453 650
 Romania	1.02%	11 960 150
 Czech Republic	0.93%	10 860 850
 Hungary	0.59%	6 965 950
 Turkey*	0.49%	5 692 000
 Slovakia	0.48%	5 605 900
 Bulgaria	0.29%	3 390 550
 Serbia**	0.22%	2 529 000
 Pakistan*	0.14%	1 664 200
 Cyprus**	0.09%	1 000 000
 Lithuania*	0.09%	1 000 000
 Slovenia**	0.09%	1 000 000
 Ukraine*	0.09%	1 000 000
<b>Total</b>	<b>100%</b>	<b>1 171 170 100</b>

# What do we buy @ CERN ?

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

# Recurrent supplies & services

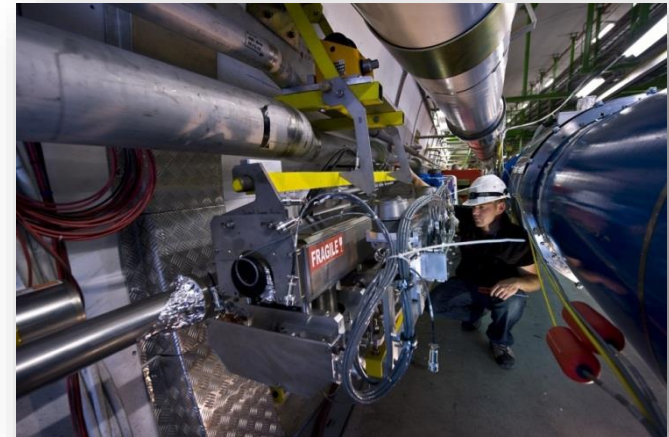
- Civil engineering
- Utilities
- Infrastructure & services
- Installation, operation & maintenance
- Data acquisition, computing & networking
- Various supplies





# 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**

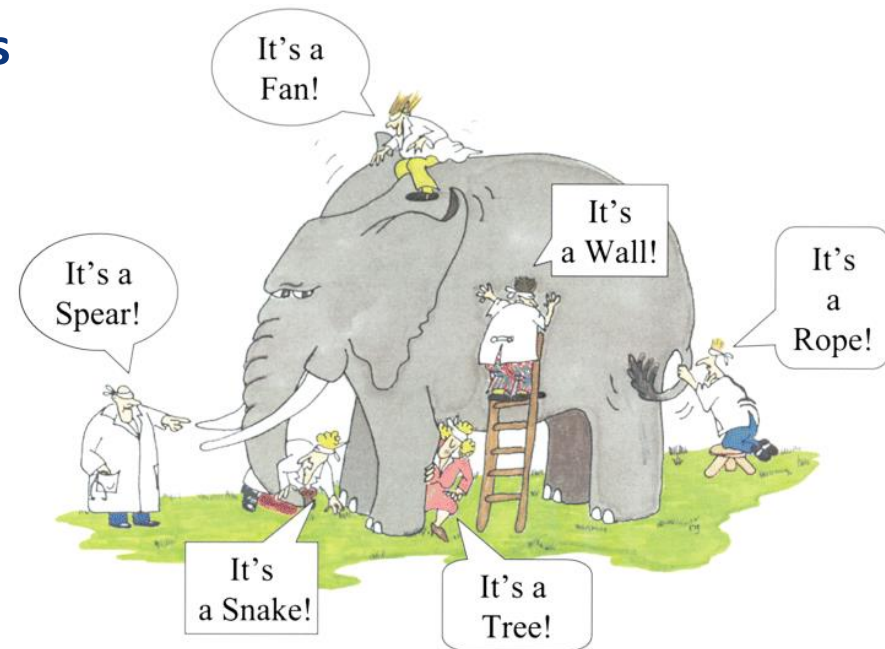
**But can be with existing technologies**

⇒ functional specification

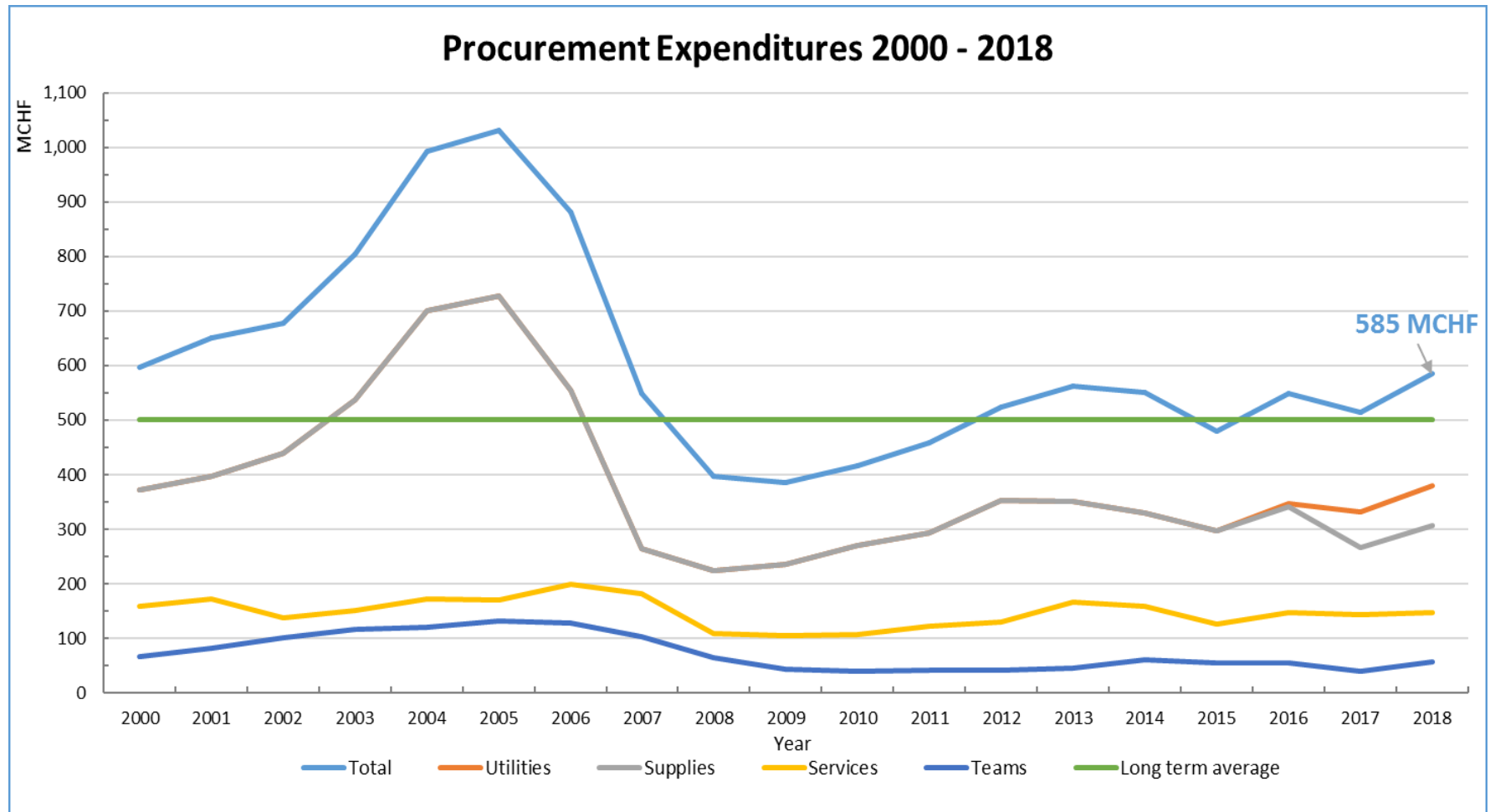
- **Non-standard products**

⇒ built to print specification

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



# Procurement Expenditures 2000 - 2018



# CERN Shopping List

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

**IPT** Procurement and Industrial Services Group

[Print Vie](#)

## 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: All	Market Survey dispatched: All
Reference: <input type="text"/>	Call for Tenders scheduled for dispatch: All
Activity Code: <input type="text"/>	Description and/or Specific Condition: <input type="text"/>
Requirement: <input type="text"/>	Commercial contact: All
Cost Range: All	Publication Date: From <input type="text"/> To <input type="text"/> 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
14-03-2019	Supply	<a href="#">New MS-4517/SMB</a>	Supply of new building 663 (Kindergarten-Jardin d'enfants) on the Swiss part of the CERN Site ( <a href="#">01020601</a> )	CERN intends to place a contract for the supply of ... Interested firms shall have a proven experience and competence in modular ... <a href="#">Read More</a>	B	Second quarter 2019	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. Pöehler</a> Commercially: <a href="#">S. Maggnan</a>	Third quarter 2019
14-03-2019	Supply	<a href="#">New MS-4516/SMB</a>	Supply of the disassembly and reassembly works of building 662 on the Swiss part of the CERN Meyrin site ( <a href="#">01020501</a> )	CERN intends to place a contract for the disassembly and reassembly ... Interested firms shall have a proven experience and competence in disassembly ... <a href="#">Read More</a>	B	Second quarter 2019	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. Pöehler</a> Commercially: <a href="#">S. Maggnan</a>	Third quarter 2019
13-03-2019	Supply	<a href="#">New MS-4515/SMB</a>	Framework Market Survey concerning the supply of general civil engineering works for the construction of new structures and industrial building on the French and/or on the Swiss part(s) of CERN ( <a href="#">01010200</a> , <a href="#">01010300</a> , <a href="#">01010400</a> , <a href="#">01020100</a> , <a href="#">01020200</a> , <a href="#">01020300</a> , <a href="#">01020400</a> )	CERN intends to place several contracts for civil engineering works for ... Interested firms shall have a proven experience and competence in general ... <a href="#">Read More</a>	B	Second quarter 2019	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. Manfredi</a> Commercially: <a href="#">S. Maggnan</a>	Second quarter 2019
13-03-2019	Supply	<a href="#">New MS-4500/TE/HL/LHC</a>	Supply of High-Resolution Digitisers ( <a href="#">03040900</a> )	CERN intends to place a contract for the supply of High-Resolution ... Interested firms shall have a proven competence and proven experience in the ... <a href="#">Read More</a>	A	Second quarter 2019	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="#">N. Magnin</a> Commercially: <a href="#">N. Aziz</a>	Second quarter 2019
27-02-2019	Supply	<a href="#">New MS-4511/TE/HL/LHC</a>	Design and supply of flexible cryostats for the High-Luminosity Project ( <a href="#">02250700</a> )	CERN intends to place a contract for the design and ... Interested firms shall have proven competence and proven experience in the ... <a href="#">Read More</a>	B	First quarter 2019	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. Ballarino</a> Commercially: <a href="#">T. Lobmaier</a>	Second quarter 2019
04-02-2019	Supply	<a href="#">New MS-4502/EN/CLIC</a>	Supply of an ultrafast laser system for the new RF photo-injector gun at CLIC facility. ( <a href="#">08010400</a> )	CERN intends to place a contract for the supply of ... Interested firms shall have proven experience and competence in the delivery ... <a href="#">Read More</a>	A	Second quarter 2019	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="#">E. Granados Mateo</a> Commercially: <a href="#">F. Bonthond</a>	Fourth quarter 2019
22-01-2019	Supply	<a href="#">New MS-4494/IT</a>	Supply of a new magnetic tape library compatible with LTO tape technology for CERN Data Archive ( <a href="#">04020400</a> )	CERN intends to place a contract for the supply of ... Interested firms shall have adequate competence and experience in the relevant ... <a href="#">Read More</a>	A		<a href="#">Market Survey documents</a>	Second quarter 2019



# 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.

# Procurement Principles

- ✓ **Transparency and Impartiality**
- ✓ **Limited Tendering**
- ✓ **Objectivity and Fair competition**
- ✓ **Selective tendering procedure**
- ✓ **Confidentiality**
- ✓ **Adjudication basis**

# 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:

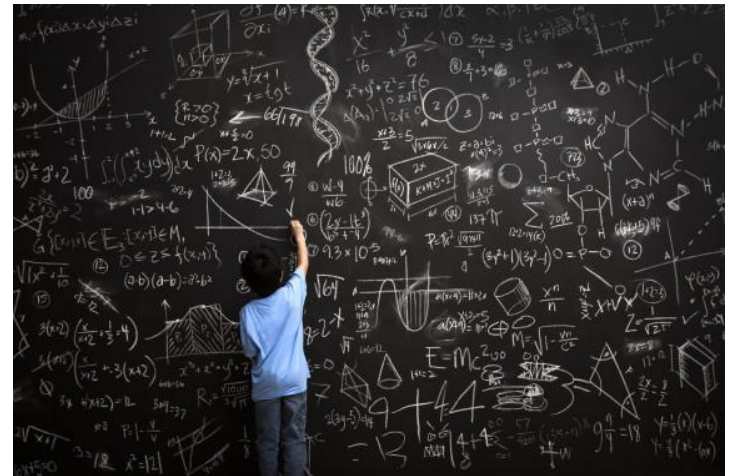
Country(ies) in which the bidder is established.



# 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	%
2013	1,092,816,950	30,025,200	2.75%
2014	1,103,322,899	30,524,000	2.77%
2015	1,062,202,700	28,965,550	2.73%
2016	1,127,444,450	30,416,150	2.7%
2017	1,142,179,450	30,964,100	2.71%
2018	1,148,237,250	30,392,150	2.65%

# Industrial Return Coefficient

IRC

Expenditure for All Countries		Expenditure by Country of Origin		Industrial Return Ratios	
Supplies	Industrial Services	Supplies	Industrial Services	Supplies	Industrial Services
IV	V	VI	VII	VIII = (VI/IV) / III	IX = (VII/V) / III
CHF	CHF	CHF	CHF	CHF	CHF
351,567,741	166,390,502	3,988,556	–	.41 (0.91)	0 (0.4)
329,242,703	159,408,925	4,466,552	–	.49 (0.91)	0 (0.4)
297,504,934	126,378,183	3,014,795	833	.37 (0.9)	0 (0.4)
342,576,843	146,917,979	2,497,033	8,705	.27 (0.9)	0 (0.4)
232,086,828	142,731,742	3,083,426	188,695	.49 (1)	.05 (0.4)
307,250,690	146,758,913	4,115,157	214,958	.58 (1)	.06 (0.4)

# 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**

# Basis of award

## - Supply Contract :

- Lowest compliant**
- Based on FCA price**
- Lowest compliant, ..... but .....not lowest cost**
  
- Takes into account:**
  - **Initial investment**
  - **Energy consumption**
  - **Spares**
  - **Maintenance**
  - **Training, etc.**
  - **Disposal costs**

# Basis of award

- **Service contract :**

«Best Value for Money» basis

→ to the bidder submitting the most economically advantageous bid

Price // Quality

The text 'Price // Quality' is displayed in a large, orange, sans-serif font. A dark brown arrow points downwards from the 'Price' part, and another dark brown arrow points upwards from the 'Quality' part, indicating that as price decreases, quality increases.

# Contact with CERN

-Procurement web page : <http://procurement.web.cern.ch/>

CERN Accelerating science

Sign in Directory

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 Reports
- 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

Accelerating Science

Register / Login to CERN e-procurement platform

Key reference documents

Who to contact

Procurement

List of poorly

Procurement

DOING BUSINESS WITH CERN

BROCHURE

DOING BUSINESS WITH CERN

VIDEO

DOING BUSINESS WITH CERN

RUNNING A CONTRACT WITH CERN

Learn more about CERN contracts

TEMPORARY LABOUR OFFICE

# Contact with CERN

## - Procurement Service :

[Procurement.Service@cern.ch](mailto:Procurement.Service@cern.ch)

<https://procurement.web.cern.ch/en/who-to-contact-at-cern>

## - Technical contacts by field of activity:

<https://procurement.web.cern.ch/who-to-contact-at-cern/technical-contacts>



# Contact in Belgium

## - ILO: Industrial Liaison Officer

### - The activities of the ILO consist in:

- Informing & help companies
- liaising with CERN, procurement and/or technical officer
- informing the procurement office about potential suppliers
- providing support to businesses in the event of any difficulty in the interaction with CERN

# Your contact for Belgium

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



## **Mr Michel PATTEET**

Conseiller Économique et Commercial

Flanders Investment & Trade c/o Consulat von Belgien - Consulat de Belgique

Gartenstrasse 36

8002 Zürich

Schweiz

TEL: +41 44 280 34 35

EMAIL: [michel.patteet@fitagency.com](mailto:michel.patteet@fitagency.com)

WEBSITE: <http://www.flandersinvestmentandtrade.com/site/landing.nsf/EN>

# Your contact for Belgium

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



## **Mr Philippe DELCOURT**

AWEX Genève - Suisse et Organisations Internationales  
10

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1201 Genève

TEL: +41 22 788 48 60

EMAIL: [awex.geneva@ties.itu.ch](mailto:awex.geneva@ties.itu.ch)

WEBSITE: <http://www.awex.be>

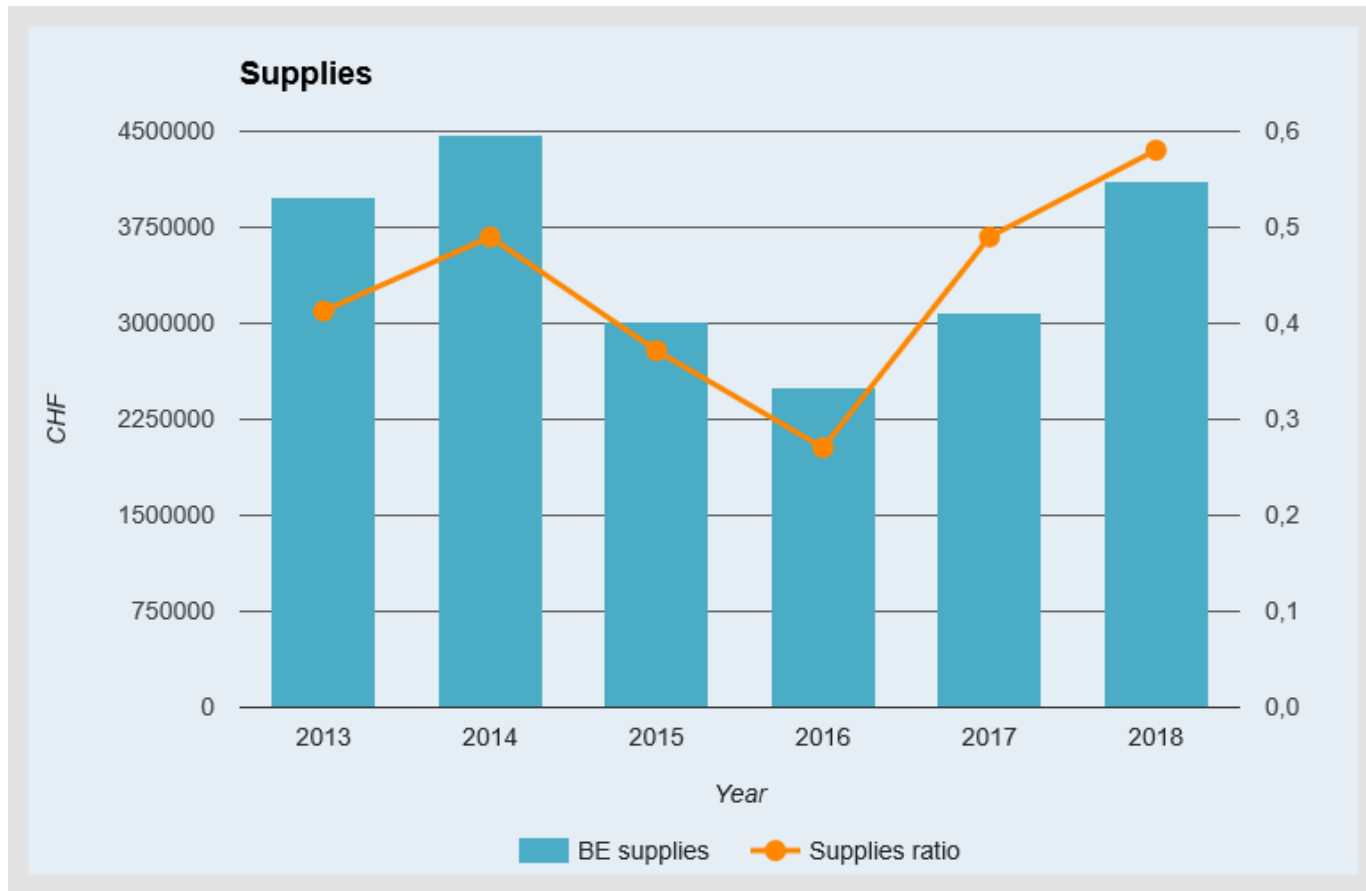


# Statistics for Belgium

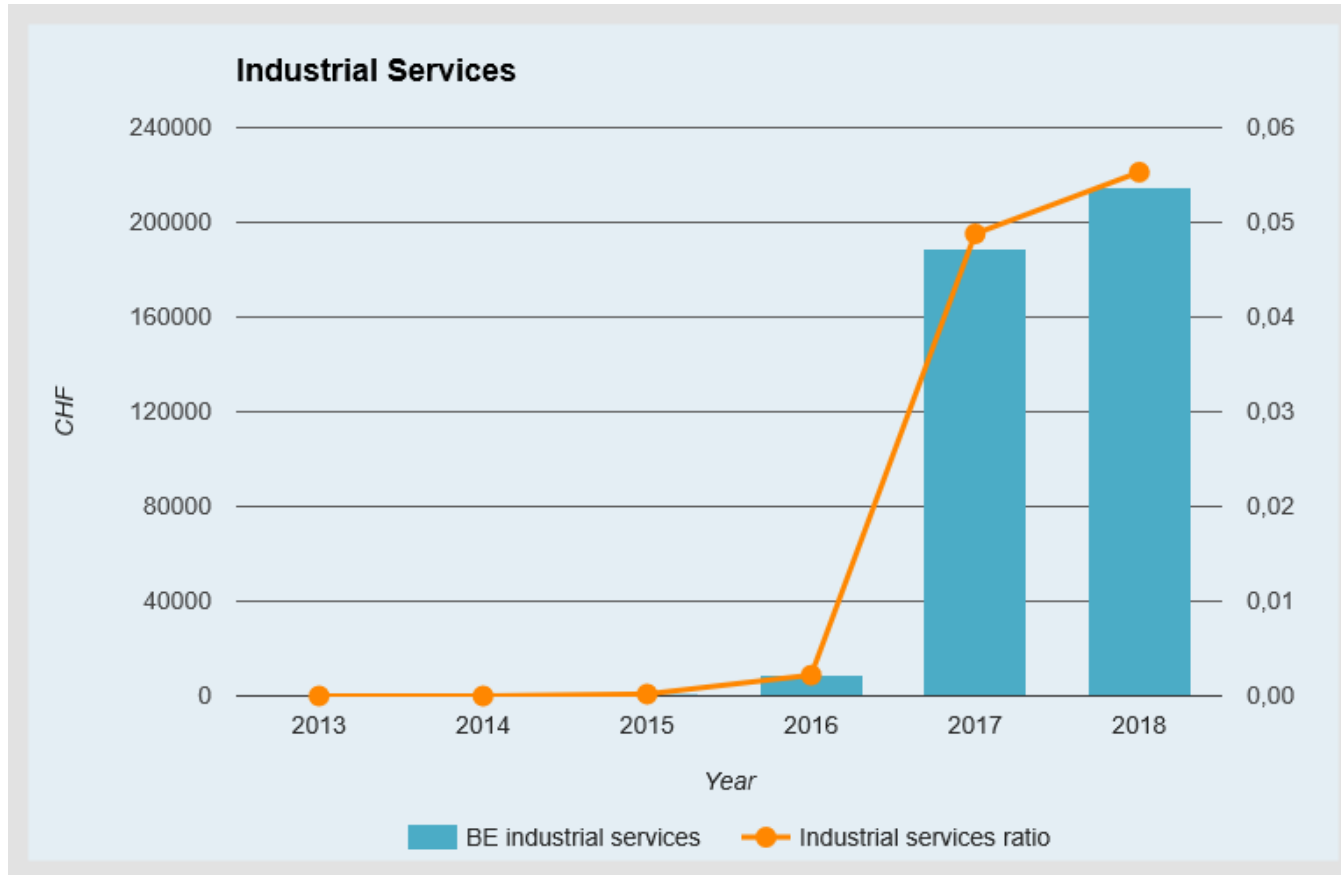
# Industrial Return Coefficient (2013-2018)

	Industrial Return Ratios	
	Supplies	Industrial Services
	VIII = (VI/IV) / III	IX = (VII/V) / III
	CHF	CHF
2013	.41 (0.91)	0 (0.4)
2014	.49 (0.91)	0 (0.4)
2015	.37 (0.9)	0 (0.4)
2016	.27 (0.9)	0 (0.4)
2017	.49 (1)	.05 (0.4)
2018	.58 (1)	.06 (0.4)

# Industrial Return Coefficient (2013-2018)



# Industrial Return Coefficient (2013-2018)



# Contract Procedures (2013 to 2018)

	Price Enquiries					
	2013	2014	2015	2016	2017	2018
Total number of Price Enquiries	285	242	214	266	218	172
Number of firms contacted	4,408	62	49	73	54	52
Percentage of firms contacted	3.54%	4.68%	4.92%	4.19%	3.3%	2.92%
Contributions as % of total	%	2.75%	2.77%	2.73%	2.7%	2.71%
Percentage of total offers	1.27%	.25%	1.92%	1.99%	1.11%	1.58%

	Market Surveys					
	2013	2014	2015	2016	2017	2018
Total number of Market Surveys	50	33	51	64	79	77
Number of firms contacted	1,064	7	9	18	25	16
Percentage of firms contacted	4.98%	3.53%	3.04%	3.03%	3.68%	4.23%
Contributions as % of total	%	2.75%	2.77%	2.73%	2.7%	2.71%
Percentage of total offers	2.34%	2.31%	1.62%	2.35%	2.39%	2.06%

	Invitations to Tender					
	2013	2014	2015	2016	2017	2018
Total number of Invitations to Tender	60	53	73	65	95	93
Number of firms contacted	760	9	10	11	16	13
Percentage of firms contacted	1.79%	1.54%	1.71%	1.83%	2.21%	2.2%
Contributions as % of total	%	2.75%	2.77%	2.73%	2.7%	2.71%
Percentage of total offers	1.22%	2.04%	1.52%	.91%	2.76%	2.37%



# Advices

- **Register in the Database !**

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



# Advices

- **Contact CERN for any question**
- **Contact your ILO**
- **Make regular contacts with Technical / Procurement Officers to learn about future needs**

# 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**





[www.cern.ch](http://www.cern.ch)