

Doing business with CERN

Dante Gregorio (dante.gregorio@cern.ch) 23 & 24 January 2017





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 benefits from immunity from national jurisdiction and execution. Thus, legal disputes between CERN and its suppliers and contractors are not submitted to national courts but solved via international arbitration.

CERN is thus entitled to establish its own internal rules necessary for its proper functioning, such as the rules under which it purchases equipment and services.



European Organization for Nuclear Research *Organisation européenne pour la recherche nucléaire*

Mission of Procurement and Industrial Services

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

- procure 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 the CERN Member States, and;
- respecting the CERN Procurement Rules.



Procurement Principles

- CERN procures supplies and services and awards orders and contracts in compliance with the principles of transparency and impartiality.
- CERN's tendering procedures are selective and do not take the form of open invitations to tender. They shall, in principle, be limited to firms established in the Member States.
- Invitation to tender and price enquiry documents shall be drafted in an objective way so as to guarantee fair competition.
- Subject to the provisions aimed at achieving balanced industrial returns for all the Member States, contracts and orders shall be awarded to the firm whose bid meets the technical, financial and delivery requirements and:
 - is either the lowest; or
 - represents the Best Value for Money.



Member States' Contribution 2015 (CHF)

Germany	20.47 %	226'987'150		Denmark	1.77 %	19'671'200
France	15.13 %	167'740'300	+	Finland	1.38 %	15'286'700
United Kingdom	14.26 %	158'118'050	¢x	Israel	1.34 %	14'877'000
Italy	11.06 %	122'665'900		Portugal	1.15 %	12'696'850
Spain	7.82 %	86'688'100		Czech Rep.	1.00 %	11'118'550
Netherlands	4.55 %	50'498'350		Hungary	0.62 %	6'915'800
Switzerland	3.87 %	42'942'500	(#	Slovakia	0.49 %	5 ' 432'050
Sweden	2.82 %	31'227'350		Bulgaria	0.29 %	3'210'050
Norway	2.80 %	31'086'900		Romania*		8'154'500
Belgium	2.76 %	30'622'650		Serbia**		1'000'000
Poland	2.75 %	30'436'050	C	Pakistan***		654'250
Austria	2.20 %	24'519'300	C *	Turkey***		3'618'750
Greece	1.45 %	16'034'400				
	France United Kingdom Italy Spain Netherlands Switzerland Sweden Norway Belgium Poland Austria	France15.13 %United Kingdom14.26 %Italy11.06 %Spain7.82 %Netherlands4.55 %Switzerland3.87 %Sweden2.82 %Norway2.80 %Belgium2.76 %Poland2.75 %Austria2.20 %	France15.13 %167'740'300United Kingdom14.26 %158'118'050Italy11.06 %122'665'900Spain7.82 %86'688'100Netherlands4.55 %50'498'350Switzerland3.87 %42'942'500Sweden2.82 %31'227'350Norway2.80 %31'086'900Belgium2.76 %30'622'650Poland2.75 %30'436'050Austria2.20 %24'519'300	France 15.13 % 167'740'300 United Kingdom 14.26 % 158'118'050 Italy 11.06 % 122'665'900 Spain 7.82 % 86'688'100 Netherlands 4.55 % 50'498'350 Switzerland 3.87 % 42'942'500 Sweden 2.82 % 31'227'350 Norway 2.80 % 31'086'900 Belgium 2.76 % 30'436'050 Poland 2.75 % 30'436'050 Austria 2.20 % 24'519'300	France 15.13 % 167'740'300 Finland United Kingdom 14.26 % 158'118'050 Israel Italy 11.06 % 122'665'900 Portugal Spain 7.82 % 86'688'100 Czech Rep. Netherlands 4.55 % 50'498'350 Hungary Switzerland 3.87 % 42'942'500 Slovakia Sweden 2.82 % 31'227'350 Bulgaria Norway 2.80 % 31'086'900 Romania* Belgium 2.76 % 30'622'650 Pakistan*** Austria 2.20 % 24'519'300 Turkey***	France 15.13 % 167'740'300 Finland 1.38 % United Kingdom 14.26 % 158'118'050 Israel 1.34 % Italy 11.06 % 122'665'900 Portugal 1.15 % Spain 7.82 % 86'688'100 Czech Rep. 1.00 % Netherlands 4.55 % 50'498'350 Hungary 0.62 % Switzerland 3.87 % 42'942'500 Slovakia 0.49 % Sweden 2.82 % 31'227'350 Bulgaria 0.29 % Norway 2.80 % 31'086'900 Romania* Belgium 2.76 % 30'436'050 Pakistan*** Austria 2.20 % 24'519'300 Turkey***

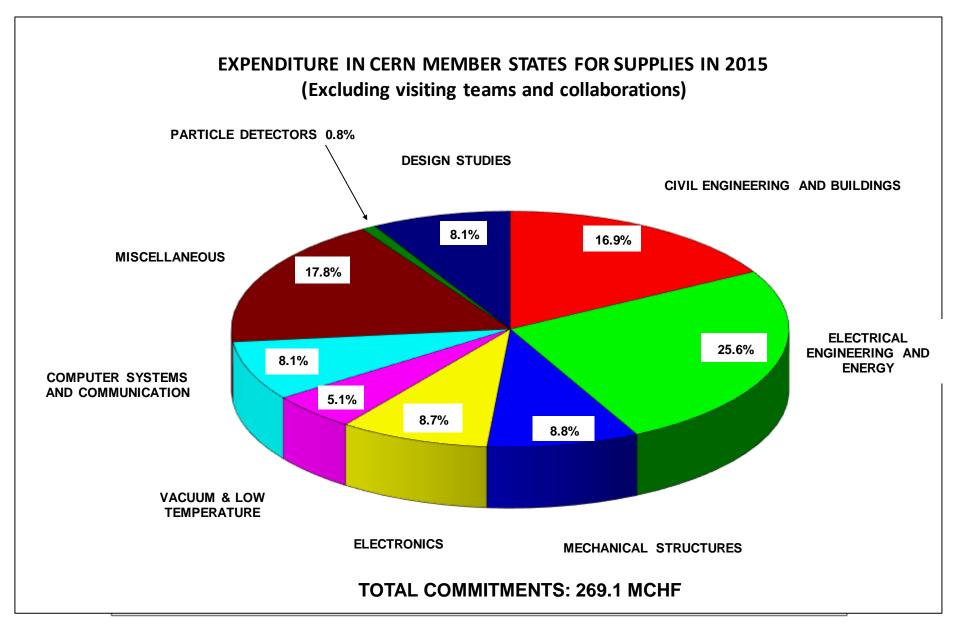
Total

1'122'202'700

* Full Member State as of 17 July 2016

** Associate Member State in the pre-stage to Membership (+ Cyprus as of 1 April 2016)

*** Associate Member State (+ Ukraine as of 5 October 2016 and India as of 16 January 2017)



What do we buy? Recurrent supplies and services

Civil engineering Buildings, roadworks, Utilities Cooling & ventilation Power distribution, cables Infrastructure & services Metal structures Mechanical engineering Radiation shielding Transport & handling Safety & access control Installation, operation & maintenance Data acquisition, computing & networking Various supplies

Furniture, tooling, gases, stationary, etc..





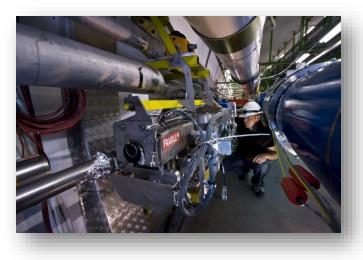




OPPORTUNITY

What do we buy? accelerator technologies required for consolidation projects and new developments

Industrial controls & field buses Timing & "fast" real-time controls Beam collimation Beam injection, ejection & dump Radio-frequency equipment Power converters Beam instrumentation & diagnostics Permanent and electromagnets Cryogenic equipment









New Projects

- •LHC Injectors Upgrade (LIU)
- Accelerators Consolidation (CONS)
- •High Luminosity LHC (HL-LHC)
- Linear Collider Studies (LC)

European Organization for Nuclear Research Organisation européenne pour la recherche nucléaire

Supplies and Services

Supply contracts: Contracts for supplies of equipment including R&D contracts, electricity, telecommunications and insurance contracts as well as maintenance and leasing contracts covering data processing, printing and telecommunication equipment.

Country of origin: In accordance with standards defined by EU i.e. the country(ies) where the supplies (including their components and sub-assemblies) are manufactured or undergo the last major transformation by the contactor or his sub-contractor.

Service contracts: Contracts for the provision of services to be executed on the CERN domain.

Country of origin: The country in which the bidder is established.



Procedures for obtaining offers

• Requirements not exceeding 10'000 CHF;

Users may issue enquiries directly provided CERN procurement rules are followed;

- Purchases between 10'000 CHF and 200'000 CHF Price Enquiries issued by Procurement Service;
- Purchases exceeding 200'000 CHF

Market Surveys & Calls for Tenders issued by Procurement Service.



Requirements between 10'000 and 200'000 CHF

Price enquiries:

- Deadline for bidders to submit bid is at least 4 weeks from mailing date;
- Invite 3 -5 firms;
- All enquiries exceeding 50'000 CHF are also sent to Industrial Liaison Officers (ILOs) for information;
- Adjudication based on lowest offer (FCA price) which complies with the technical, financial and delivery requirements, <u>subject to</u> the rules aimed at achieving well balanced industrial return coefficients for the Member States (from 100'000 CHF).



Requirements exceeding 200'000 CHF

Market Survey followed by a Call for Tenders:

- Announcement in the document "Advance information on Forthcoming Market Surveys and Calls for Tenders expected to exceed 200'000 Swiss francs" [Terrent and the second seco
- Market survey;
 - brief technical description (1-2 pages);
 - qualification criteria (financial and technical);
 - questionnaire.

Current Market Surveys available on Procurement Service home page

https://found.cern.ch/javaext/found/CFTSearch.do

For theoming market surveys a: EN English (United States) E provided by CERN						🖉 🔒 🎋 🗙 🛃 Google				
	Favorites Tools									
Convert		Park.							x	
Favorites of Forthcoming market surveys and calls for tenders						🤷 • 🖄 - 🗅 🖶 • Bage • Safety • Tgols • 😜				
Forth	ncomir	-	t surveys a						<u>Print Viev</u>	
n the line er represents ICHF. Search	ntitled Cost Rang	e, a very rough indication at less than 750 kCHF, I	nd calls for tenders expected n of the cost range of the pr B represents items between	oduct is given in the for	rm of lett	ers A, B, C, D		d D represents it	ems above 10	
Menu				AH	1					
Type of Con Reference:	tract: All	Cost Range:		All v September v 2010 v						
Reference: Activity Cod			· · · · · · · · · · · · · · · · · · ·							
lequirement			lers scheduled for dispatch: and/or Specific Condition:	All M						
Search C		Description	and/or specific condition:		J					
Type of Contract	Reference	Requirement (Activity Code)	Description/Spe	cific Condition	Cost Range	Market Survey scheduled for dispatch	Contacts and Interest in being contacted	Market Survey Documents	Invitation to Tender scheduled to dispatch	
Supply	IT-3454/IT	Provision of external printshop activities (878)	Description: Protting of scientific publications and official CERN committee documents. Currently These services interaction of the science of acquiring these activities from an external supplier. Specific condition: Interested from must have the ability to react guidy to request, have a short turn-stound CERN and must be able to accept the electronic submission of documents.		в	September 2010	To be contacted send the attached form an e-mail purchasing.service@icern.ch Technically: N. Pocock Commercially: S. Sonnerat	No documents available	December 2010	
			Description: The contract shall include the supply and installation of access control and video surveillance systems for all CEBN sites, including surveillance systems for all CEBN sites, and using the areas concerned do not include the accelerator interfocked areas. The access system mat be based on Oracle databases, RFID technologi & TCP/I networking and open protocols for integration of card readers. The angle analogua and dight IP-based video surveillance cameras from multiple manufacturers. Specific Conflictor:							



Requirements exceeding 200'000 CHF

Call for tenders:

- Deadline for bidders to submit bid is at least 4 weeks from mailing date;
- Invite
 - 10 firms for contracts between 200'000 and 750'000 CHF;
 - 15 firms for contracts exceeding 750'000 CHF;
- All call for tenders are also sent to Industrial Liaison Officers (ILOs) for information;
- Adjudication based on

-lowest offer (FCA price) <u>subject to</u> the rules aimed at achieving well balanced industrial return coefficients for the Member States, or

-Best-value-for-money basis (for service contracts), but <u>not subject to</u> the rules aimed at achieving well balanced industrial return coefficients for the Member States. The adjudication is based on both price and quality criteria.



Industrial Return Coefficient

The return coefficient of a Member State for Supply contracts for a given twelve-month period starting on 1st March is defined as:

The ratio between that Member State's percentage share of all purchases of supplies (excluding purchases funded by non-Member States) during the preceding four calendar years and that State's percentage contribution to the Budget over the same period.



European Organization for Nuclear Research Organisation européenne pour la recherche nucléaire

Well Balanced Member States

For the period 01.03.2016 and 28.02.2017, a CERN Member State is considered to be **poorly balanced** if its Industrial Return Coefficient is:

< 0.90 for Supply contracts;

< 0.40 for Industrial Service contracts.

Otherwise, it is considered to be well balanced.



•

۲

European Organization for Nuclear Research Organisation européenne pour la recherche nucléaire

Well Balanced Member States

For calls for tenders for **Supply contracts** issued between 01.03.2016 and 28.02.2017, the following CERN Member States are considered to be well balanced:

Bulgaria, Czech Republic, France, Italy, Hungary, Switzerland

For calls for tenders issued between 01.03.2016 and 28.02.2017, the following CERN Member States are well balanced for **Industrial Service contracts**:

Austria, Denmark, France, Spain, Switzerland, United Kingdom

Greece has an Industrial Return Coefficient of 0.36 for supplies and 0.18 for industrial services and, therefore, is poorly balanced.



The alignment rule

For contracts to be awarded on the lowest compliant bid basis and exceeding 100'000 CHF in value.

Under certain well-defined conditions 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.



European Organization for Nuclear Research *Organisation européenne pour la recherche nucléaire*

Study of Technology Transfer through Procurement

- Period studied 1997 2001
- Excluded: civil engineering, standard items, services and low value orders
- 629 companies contacted.

ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE CERN EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

CERN-2003-005 11 September 2003 Education and Technology Transfer Division

TECHNOLOGY TRANSFER AND TECHNOLOGICAL LEARNING THROUGH CERN'S PROCUREMENT ACTIVITY

Erkko Autio Helsinki Institute of Physics, Helsinki, Finland & CERN, Geneva, Switzerland

> Marilena Bianchi-Streit CERN, Geneva, Switzerland

Ari-Pekka Hameri Helsinki Institute of Physics, Helsinki, Finland & HEC, Lausanne, Switzerland



European Organization for Nuclear Research *Organisation européenne pour la recherche nucléaire* GENEVA 2003

Result of contracts with CERN

- 38% had developed new products
- 42% increased international exposure
- 44% improved technological learning
- 52% would have had poorer sales performance without CERN
- 17% opened a new market
- 60% acquired new customers
- all firms had derived great value from CERN as a marketing reference







Successful suppliers

- Often small medium sized and flexible firms
- Ensure full understanding of specifications over specifying usually proves to be too expensive;
- Regular communication with CERN (problems, issues, alternatives, etc.)
- Take into account test requirements and documentation
- Verification of performance by sub-contractors



Registering as a Supplier



FP Procurement and Industrial Services Group

Register for our Suppliers Database

Doing Business with CERN

- How to do Business with CERN
- · Procurement Strategy and Policy
- Market Surveys and Calls for Tender
- Who to contact at CERN
- Who to contact in your Country
- Register for our Suppliers Database

For any orders of goods or services a supplier must be registered in CERN's Supplier Database. The database is also used to find suppliers for forthcoming Price Enquiries and Invitations to Tender, so registration is actively encouraged for any firms wishing to do business with CERN.

- · Register a new supplier or service provider
- · Notify us of changes to an existing registration



European Organization for Nuclear Research Organisation européenne pour la recherche nucléaire

Industrial Liaison Officers

Prof Evangelos GAZIS National Technical University of Athens Physics Department Zografou Campus GR-157 80 ATHENS Tel: +30-210-7723003 Tel: +41-22-7671162 (CERN) Tel: +30-6977-261060 (mobile) Email: egazis@central.ntua.gr

Dr Michele BARONE Institute of Nuclear Physics National Center for Scientific Research "Demokritos". P.O. Box 60228 GR-153 10 AG. PARASKEVI ATTIKIS Tel: +30-210-650 35 27 Email: barone@inp.demokritos.gr

Prof Constantinos FOUNTAS

University of Ioannina Physics Department, F3.303, Ioannina 45110 Tel: +30-265-1008750 Tel: +41-22-766-2270 Email: Costas.Fountas@cern.ch

