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Annex - Part 7/11

## **COMMISSION STAFF WORKING DOCUMENT**

### **IMPACT ASSESSMENT**

*Accompanying the document*

#### **Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**establishing rules on the access of third country goods and services to the European Union's internal market in public procurement and procedures supporting negotiations on access of European Union goods and services to the public procurement markets of third countries**

**Annex**

{ COM(2012) 124 final }  
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## ANNEX 7

### METHODOLOGICAL ANNEX

In the context of the Impact Assessment, the following impacts have been measured and analysed:

- Rules clarification
- Sectors most affected and level playing field
- Trade flows: Imports (including supply chains)
- Trade flows: Exports (retaliation and potential exports)
- Employment
- Leverage
- Public finances (and innovation)
- Administrative burden
- Environment
- Innovation

"Rules clarification" and "sectors most affected and level playing field" have been dealt in the problem analysis and in the Annex 9 "industrial analysis". The various retaliation scenarios are explained in the Annex 4 "Impact Analysis" and in the Impact Assessment itself. The latter also provides information on environmental and innovation impacts.

We shall therefore focus ourselves on the remaining impacts.

#### **2- TRADE FLOWS / IMPORTS:**

##### **2.1 Overall methodology**

Two exercises of measurement of foreign participation in the EU public procurement market have been undertaken:

##### **(a) Actual participation of foreign firms in the EU public procurement market**

- An exhaustive analysis of all contract award notices of 2007 to identify all contracts awarded to non-EU firms: **10,7 billion EUR** were awarded to firms from the 12 main non-EEA/EFTA trading partners (thus, **2,9%** of the whole 2007 procurement market).
- A sample-based analysis of contract award notices in 2007-2009, with the help of a D&B database (in the context of the analysis of cross-border procurement in the EU): 12,4-13,9% of all contract awards (in value) were identified as awarded to foreign companies (including their subsidiaries), out of which 32% were from non-EEA/EFTA countries (thus, **4%** of the whole 2007 procurement market). No absolute values were provided - still, if extrapolated to 2007, the amount would have been **14,7 billion EUR**.

## (b) Potential penetration rates of foreign goods and services in the EU public procurement market

There is no way to trace statistically the nationality of the imported goods purchased by EU contracting authorities:

- Applying the overall import penetration rate of the public sector: as the imports of goods and services from the 12 trading partners represented 840 billion EUR (7% of EU GDP) in 2007. After applying a re-correction for the lower import rate of the public sector (due to the composition of government purchases), the expected level of foreign penetration of foreign goods and services should be globally ceteris paribus 2,9% or 2,5% (without fuel and agricultural products) of the EU public procurement market (i.e. **9,3-10,7 billion EUR**).

- Applying the specific import penetration rates of the goods and services procured throughout EU procedures: If we extrapolate the overall import rate of each NACE category in the EU public procurement market (cf. Annex 7) for goods and we public contracts for services awarded to subsidiaries of foreign companies, one obtains **25 billion EUR (6,5%** of the whole 2007 procurement market), out of which **17 billion EUR** for 12 main non-EEA/EFTA trading partners (**4,6%** of the whole 2007 procurement market). More details are available in pages 1-7 of Annex 7.

Finally, in the consultation of stakeholders, 20% of contracting authorities indicated that they had received bids from abroad or containing foreign goods and services, 19% indicated that they had awarded a contract to a foreign firm and only 3% indicated that it had rejected a foreign bid.

## **2.2 Measuring penetration of foreign goods and services in the EU public procurement market (IMPORTS)**

### *Methodological approach used in the Impact Assessment*

Yet, in accordance with WTO law, the GPA provides access not to firms but to foreign goods and services. It is therefore necessary to estimate the volume of goods and services imported in the public procurement market.

In the context of this impact assessment, it is proposed to segment the public procurement market into CPV/NACE codes and to extrapolate the ratio of imports of each CPV/NACE segment (private and public market) into the public procurement market. The GPA statistical report provides the breakdown of public procurement per CPV code. CPV codes can be assimilated to NACE codes.

We have used the EU GPA statistical report 2007, which gives breakdowns of public procurement by CPV code and type of entity.

The EU GPA statistical report is modelled on the scope of EU public procurement directives and makes the distinction between covered and non-covered procurement. It also reflects the structure of expenditure of public procurement.

It allows therefore extrapolating the impact of restrictive measures that would result from the implementation of restriction such as the country specific derogations.

Exports are provided by NACE Codes, which can be compared to CPV Codes.

For each NACE division, we have calculated the ratio of extra-EU imports of a country X to the EU market (total turnover + imports extra EU - exports extra EU) based on SBS Survey 2007 of ENTR.

We have then calculated the exports in covered and non-covered procurement markets.

Table 1 - Imports in the public procurement market per NACE/CPV codes

	REVISED - No ADDED VALUE		
	% imports	PP market (all entities)	imported goods in PP (Bn EUR)
PRODUCTS OF AGRICULTURE, HUNTING AND RELATED SERVICES		0,08	0,0
FISH AND OTHER FISHING PRODUCTS, SERVICES INCIDENTAL TO FISHING		0,01	0,0
COAL AND LIGNITE; PEAT	54%	0,08	0,9
CRUDE PETROLEUM AND NATURAL GAS; SERVICES INCIDENTAL TO OIL AND GAS EXTRACTION EXCLUDING SURVEYING		1,49	
URANIUM AND THORIUM ORES		0,11	
METAL ORES	49%	0,00	0,0
OTHER MINING AND QUARRYING PRODUCTS		0,55	
PRODUCTS OF FORESTRY, LOGGING AND RELATED SERVICES		0,19	0,0
FOOD PRODUCTS AND BEVERAGES	6%	2,78	0,2
TOBACCO PRODUCTS	0%	0,01	0,0
TEXTILES	35%	0,41	1,2
WEARING APPAREL; FURS		2,84	
LEATHER AND LEATHER PRODUCTS		0,15	
WOOD AND PRODUCTS OF WOOD AND CORK (EXCEPT FURNITURE), ARTICLES OF STRAW AND PLAITING MATERIALS	9%	0,17	0,0
PULP, PAPER AND PAPER PRODUCTS	8%	0,55	0,0
PRINTED MATTER AND RECORDED MEDIA		0,92	0,0
COKE, REFINED PETROLEUM PRODUCTS AND NUCLEAR FUEL	13%	4,30	0,6
CHEMICALS, CHEMICAL PRODUCTS AND MAN-MADE FIBRES	19%	15,47	2,9
RUBBER AND PLASTIC PRODUCTS	9%	0,72	0,1
OTHER NON-METALLIC MINERAL PRODUCTS	5%	0,12	0,0
BASIC METALS	24%	0,97	0,2
FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	6%	8,91	0,5
MACHINERY AND EQUIPMENT N.E.C.	17%	7,35	1,2
OFFICE MACHINERY AND COMPUTERS	70%	8,00	5,6
ELECTRICAL MACHINERY AND APPARATUS N.E.C.	16%	4,20	0,7
RADIO, TELEVISION AND COMMUNICATION EQUIPMENT AND APPARATUS	39%	3,20	1,2
MEDICAL, PRECISION AND OPTICAL INSTRUMENTS, WATCHES AND CLOCKS	36%	11,35	4,1
MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	8%	4,56	0,4
OTHER TRANSPORT EQUIPMENT	33%	11,28	3,7
FURNITURE; OTHER MANUFACTURED GOODS N.E.C.	25%	1,66	0,4
RECOVERED SECONDARY RAW MATERIALS	0	0,01	0,0
ELECTRICAL ENERGY, GAS, STEAM AND HOT WATER		15,10	0,0
COLLECTED AND PURIFIED WATER, DISTRIBUTION SERVICES OF WATER		0,33	0,0
		<b>TOTAL</b>	<b>23,9</b>

The same is also done for services:

**Table 2 - Imports of services per CPC code**

			% imports	PP market	PPimported
Construction work.	ESTAT	Construction services	0,5%	102	0,5
Repair, maintenance and installation services.	ESTAT		0	12	0,0
Land transport services and transport via pipeline services.	ESTAT	Land transport services and transport via pipeline services.	2,8%	6	0,2
Air transport services.	ESTAT	Air transport services.	30,5%	0,6	0,2
Postal and telecommunications services.	ESTAT	Postal and telecommunications services.	2,0%	3,4	0,1
	ESTAT	Postal services	2,3%		
	ESTAT	Telecom services	1,9%		
Insurance and pension funding services, except compulsory social security services and insurance-related services.	ESTAT	Insurance services			
Services auxiliary to financial intermediation.	ESTAT	Financial services	5,1%	18,4	0,9
Real estate services.	ESTAT		0	0,4	
Computer and related services.	ESTAT	Computer & information services	3,1%	36	1,1
Architectural, construction, legal, accounting and business services.	ESTAT	Architectural, construction, legal, accounting and business services.	3,8%	23,5	0,9
	ESTAT	Legal, accounting, consulting	3,0%		
	ESTAT	Advertising & market research	7,6%		
	ESTAT	Architectural, engineering	3,2%		
Printing, publishing and related services.	ESTAT		0	1,6	0,0
Sewage- and refuse-disposal services, sanitation and environmental services.	COMEXT	Sewage & refuse diposal	0	8,7	0,0

As a result, one finds that the total imports can be estimated to 23,9 billion EUR of goods and 3,9 billion EUR of services.

It is important to underline that for the US, the NACE 35 contains both the imports of airplanes and railway equipment. Since the former are seldom purchased in the context of public procurement, we had to withdraw aircraft imports from the extrapolation.

Under these circumstances, the **real** total imports can be estimated at 21 billion EUR of goods and 4 billion EUR of services, hence 25 billion EUR.

The 12 largest non-EU trading partners account for 17 billion EUR of goods and services, hence 60% of this trade. The remaining 40% contains notably the EFTA and Switzerland, which shall not be affected by the instrument, and purchases of fuel and energy from other countries than the 12 main trading partners (Middle East, Africa).

This approach has many advantages. First and foremost, it could dwell on previous analyses of the size of public procurement markets. Furthermore, it takes into account the real size of government consumption by incorporating import penetration in the public sector. Yet, its main drawback is that it may underestimate an above-average EU penetration of specific products and services.

For this reason, we propose to undertake a countercheck through another methodology.

#### *Countercheck - Using tariff lines*

It was possible to countercheck imports with the main tariff lines expressed in H.S. codes of products that tend to be absorbed by public procurement.

This list was pre-selected by ECORYS

The choice of products takes into account the supply chains of the products in question. For instance, only exports of final products were taken into consideration. In particular, although the purchases of railways fall in the scope of public procurement procedures, railway companies will buy trains through procedures, whereas parts will be purchased by railway equipment industries (certainly in countries like China). Also, among pharmaceutical products, only off-the-shelf products were taken, as the latter tend to be purchased by final consumers, eventually with social benefits.

In this context, the following tariff lines were taken onboard:



**Table 3 - Tariff lines (ECORYS)**

2941:ANTIBIOTICS
3003:MEDICAMENTS CONSISTING OF TWO OR MORE CONSTITUENTS MIXED TOGETHER FOR THERAPEUTIC OR PROPHYLACTIC USES, NOT IN MEASURED DOSES OR PUT UP FOR RETAIL SALE (EXCL. GOODS OF HEADING 3002, 3005 OR 3006)
3005:WADDING, GAUZE, BANDAGES AND THE LIKE, E.G. DRESSINGS, ADHESIVE PLASTERS, POULTICES, IMPREGNATED OR COVERED WITH PHARMACEUTICAL SUBSTANCES OR PUT UP FOR RETAIL SALE FOR MEDICAL, SURGICAL, DENTAL OR VETERINARY PURPOSES
3006:PHARMACEUTICAL PREPARATIONS AND PRODUCTS OF SUBHEADINGS 3006.10.10 TO 3006.60.90
4406:RAILWAY OR TRAMWAY SLEEPERS "CROSS-TIES" OF WOOD
7302:RAILWAY OR TRAMWAY TRACK CONSTRUCTION MATERIAL OF IRON OR STEEL, THE FOLLOWING : RAILS, CHECK-RAILS AND RACK RAILS, SWITCH BLADES, CROSSING FROGS, POINT RODS AND OTHER CROSSING PIECES, SLEEPERS "CROSS-TIES", FISH-PLATES, CHAIRS, CHAIR WEDGES, SOLE PLATES "BASE PLATES", RAIL CLIPS, BEDPLATES, TIES AND OTHER MATERIAL SPECIALISED FOR JOINTING OR FIXING RAILS
8310:SIGN-PLATES, NAME-PLATES, ADDRESS-PLATES AND SIMILAR PLATES, NUMBERS, LETTERS AND OTHER SYMBOLS, OF BASE METAL, INCL. TRAFFIC SIGNS (EXCL. THOSE OF HEADING 9405, TYPE AND THE LIKE, AND SIGNAL BOARDS, SIGNAL DISCS AND SIGNAL ARMS FOR TRAFFIC OF HEADING 8608)
8401:NUCLEAR REACTORS; FUEL ELEMENTS "CARTRIDGES", NON-IRRADIATED, FOR NUCLEAR REACTORS; MACHINERY AND APPARATUS FOR ISOTOPIC SEPARATION; PARTS THEREOF
8410:HYDRAULIC TURBINES, WATER WHEELS, AND REGULATORS THEREFOR (EXCL. HYDRAULIC POWER ENGINES AND MOTORS OF HEADING 8412)
8416:FURNACE BURNERS FOR LIQUID FUEL, FOR PULVERISED SOLID FUEL OR FOR GAS; MECHANICAL STOKERS, INCL. THEIR MECHANICAL GRATES, MECHANICAL ASH DISCHARGERS AND SIMILAR APPLIANCES; PARTS THEREOF
8526:RADAR APPARATUS, RADIO NAVIGATIONAL AID APPARATUS AND RADIO REMOTE CONTROL APPARATUS
8530:ELECTRICAL SIGNALLING, SAFETY OR TRAFFIC CONTROL EQUIPMENT FOR RAILWAYS, TRAMWAYS, ROADS, INLAND WATERWAYS, PARKING FACILITIES, PORT INSTALLATIONS OR AIRFIELDS (EXCL. MECHANICAL OR ELECTROMECHANICAL EQUIPMENT OF HEADING 8608); PARTS THEREOF
8601:RAIL LOCOMOTIVES POWERED FROM AN EXTERNAL SOURCE OF ELECTRICITY OR BY ELECTRIC ACCUMULATORS
8602:RAIL LOCOMOTIVES (EXCL. THOSE POWERED FROM AN EXTERNAL SOURCE OF ELECTRICITY OR BY ACCUMULATORS); LOCOMOTIVE TENDERS
8603:SELF-PROPELLED RAILWAY OR TRAMWAY COACHES, VANS AND TRUCKS (EXCL. THOSE OF HEADING 8604)
8604:RAILWAY OR TRAMWAY MAINTENANCE OR SERVICE VEHICLES, WHETHER OR NOT SELF-PROPELLED, E.G., WORKSHOPS, CRANES, BALLAST TAMPERS, TRACKLINERS, TESTING COACHES AND TRACK INSPECTION VEHICLES
8605:RAILWAY OR TRAMWAY PASSENGER COACHES, LUGGAGE VANS, POST OFFICE COACHES AND OTHER SPECIAL PURPOSE RAILWAY OR TRAMWAY COACHES (EXCL. SELF-PROPELLED RAILWAY OR TRAMWAY COACHES, VANS AND TRUCKS, RAILWAY OR TRAMWAY MAINTENANCE OR SERVICE VEHICLES AND GOODS VANS AND WAGONS)
8606:RAILWAY OR TRAMWAY GOODS VANS AND WAGONS (EXCL. SELF-PROPELLED AND LUGGAGE VANS AND POST OFFICE COACHES)

8608:RAILWAY OR TRAMWAY TRACK FIXTURES AND FITTINGS (EXCL. SLEEPERS OF WOOD, CONCRETE OR STEEL, SECTIONS OF TRACK AND OTHER TRACK FIXTURES NOT YET ASSEMBLED AND RAILWAY OR TRAMWAY TRACK CONSTRUCTION MATERIAL); MECHANICAL, INCL. ELECTROMECHANICAL, SIGNALLING, SAFETY OR TRAFFIC CONTROL EQUIPMENT FOR RAILWAYS, TRAMWAYS, ROADS, INLAND WATERWAYS, PARKING FACILITIES, PORT INSTALLATIONS OR AIRFIELDS; PARTS OF THE FOREGOING
8705:SPECIAL PURPOSE MOTOR VEHICLES (OTHER THAN THOSE PRINCIPALLY DESIGNED FOR THE TRANSPORT OF PERSONS OR GOODS), E.G. BREAKDOWN LORRIES, CRANE LORRIES, FIRE FIGHTING VEHICLES, CONCRETE-MIXER LORRIES, ROAD SWEEPER LORRIES, SPRAYING LORRIES, MOBILE WORKSHOPS AND MOBILE RADIOLOGICAL UNITS
8709:WORKS TRUCKS, SELF-PROPELLED, NOT FITTED WITH LIFTING OR HANDLING EQUIPMENT, OF THE TYPE USED IN FACTORIES, WAREHOUSES, DOCK AREAS OR AIRPORTS FOR SHORT DISTANCE TRANSPORT OF GOODS; TRACTORS OF THE TYPE USED ON RAILWAY STATION PLATFORMS; PARTS OF THE FOREGOING VEHICLES, N.E.S.
8710:TANKS AND OTHER ARMoured FIGHTING VEHICLES, MOTORISED, WHETHER OR NOT FITTED WITH WEAPONS, AND PARTS OF SUCH VEHICLES, N.E.S.
8904:TUGS AND PUSHER CRAFT
8905:LIGHT-VESSELS, FIRE-FLOATS, DREDGERS, FLOATING CRANES, AND OTHER VESSELS THE NAVIGABILITY OF WHICH IS SUBSIDIARY TO THEIR MAIN FUNCTION; FLOATING DOCKS, FLOATING OR SUBMERSIBLE DRILLING OR PRODUCTION PLATFORMS (EXCL. FISHING VESSELS AND WARSHIPS)
8906:VESSELS, INCL. WARSHIPS AND LIFEBOATS (EXCL. ROWING BOATS AND OTHER VESSELS OF HEADING 8901 TO 8905 AND VESSELS FOR BREAKING UP)
8907:RAFTS, TANKS, COFFER-DAMS, LANDING STAGES, BUOYS, BEACONS AND OTHER FLOATING STRUCTURES (EXCL. VESSELS OF HEADING 8901 TO 8906 AND FLOATING STRUCTURES FOR BREAKING UP)
8908:VESSELS AND OTHER FLOATING STRUCTURES FOR BREAKING UP
9005:BINOCULARS, MONOCULARS, ASTRONOMICAL AND OTHER OPTICAL TELESCOPES, AND MOUNTINGS THEREFOR; OTHER ASTRONOMICAL INSTRUMENTS AND MOUNTINGS THEREFOR (EXCL. INSTRUMENTS FOR RADIO-ASTRONOMY AND OTHER INSTRUMENTS OR APPARATUS SPECIFIED ELSEWHERE)
9009:PHOTOCOPYING APPARATUS INCORPORATING AN OPTICAL SYSTEM OR OF THE CONTACT TYPE AND THERMO-COPYING APPARATUS
9011:OPTICAL MICROSCOPES, INCL. THOSE FOR PHOTOMICROGRAPHY, CINEPHOTOMICROGRAPHY OR MICROPROJECTION (EXCL. BINOCULAR MICROSCOPES FOR OPHTHALMOLOGY AND INSTRUMENTS, APPLIANCES AND MACHINES OF HEADING 9031)
9012:ELECTRON MICROSCOPES, PROTON MICROSCOPES AND DIFFRACTION APPARATUS
9014:DIRECTION FINDING COMPASSES; OTHER NAVIGATIONAL INSTRUMENTS AND APPLIANCES (EXCL. RADIO NAVIGATIONAL EQUIPMENT)
9015:SURVEYING, INCL. PHOTOGRAMMETRICAL SURVEYING, HYDROGRAPHIC, OCEANOGRAPHIC, HYDROLOGICAL, METEOROLOGICAL OR GEOPHYSICAL INSTRUMENTS AND APPLIANCES (EXCL. COMPASSES); RANGEFINDERS
9018:INSTRUMENTS AND APPLIANCES USED IN MEDICAL, SURGICAL, DENTAL OR VETERINARY SCIENCES, INCL. SCINTIGRAPHIC APPARATUS, OTHER ELECTRO-MEDICAL APPARATUS AND SIGHT-TESTING INSTRUMENTS, N.E.S.
9020:BREATHING APPLIANCES AND GAS MASKS (EXCL. PROTECTIVE MASKS HAVING NEITHER MECHANICAL PARTS NOR REPLACEABLE FILTERS, AND ARTIFICIAL RESPIRATION OR OTHER THERAPEUTIC RESPIRATION APPARATUS)

9021:ORTHOPAEDIC APPLIANCES, INCL. CRUTCHES, SURGICAL BELTS AND TRUSSES; SPLINTS AND OTHER FRACTURE APPLIANCES; ARTIFICIAL PARTS OF THE BODY; HEARING AIDS AND OTHER APPLIANCES WHICH ARE WORN OR CARRIED, OR IMPLANTED IN THE BODY, TO COMPENSATE FOR A DEFECT OR DISABILITY
9022:APPARATUS BASED ON THE USE OF X-RAYS OR OF ALPHA, BETA OR GAMMA RADIATIONS, WHETHER OR NOT FOR MEDICAL, SURGICAL, DENTAL OR VETERINARY USES, INCL. RADIOGRAPHY OR RADIOTHERAPY APPARATUS, X-RAY TUBES AND OTHER X-RAY GENERATORS, HIGH TENSION GENERATORS, CONTROL PANELS AND DESKS, SCREENS, EXAMINATION OR TREATMENT TABLES, CHAIRS AND THE LIKE
9402:MEDICAL, SURGICAL, DENTAL OR VETERINARY FURNITURE, E.G. OPERATING TABLES, EXAMINATION TABLES, HOSPITAL BEDS WITH MECHANICAL FITTINGS AND DENTISTS' CHAIRS; BARBERS' CHAIRS AND SIMILAR CHAIRS HAVING ROTATING AS WELL AS BOTH RECLINING AND ELEVATING MOVEMENT; PARTS THEREOF
9704:POSTAGE OR REVENUE STAMPS, STAMP-POSTMARKS, FIRST-DAY COVERS, POSTAL STATIONERY, STAMPED PAPER AND THE LIKE, USED, OR IF UNUSED, NOT OF CURRENT OR NEW ISSUE IN WHICH THEY HAVE, OR WILL HAVE, A RECOGNISED FACE VALUE

This leads to the following imports into the EU public procurement market:

**Table 4 - Imports (measured through tariff lines)**

	GPA Reports	Tariff lines	Tariff lines
		MIN	MAX
USA	6,7	3,6	13
Japan	2,0	0,9	2,5
Canada	0,4	0,2	0,4
Korea	0,9	0,2	0,4
Mexico	0,1	-	-
Israel	0,2	-	-
China	5,2	1,5	2,6
Russia	0,7	0,2	0,2
India	0,3	0,07	0,3
Brazil	0,1	0,05	0,1
Turkey	0,3	0,1	0,1
Australia	0,1	-	-

To circumvent the problem of health-related tariff lines, we have created a minimum and maximum impact calculation. In fact, in 2007, only 15 billion EUR of pharmaceutical products and 11 billion EUR of medical equipment were purchased through a procedure covered by the EU directives - yet the of health-related expenditure on goods and services amounted to 4,12% of the EU GDP, thus some 500 billion EUR. As a result, pharmaceutical products and medical equipment tenders published in the OJ amounted to respectively only 3% and 2% of the whole health-related expenditure. To be sure, not to minimise any impact on imports, we have therefore applied the 16% rate of public expenditure covered by the directives in the minimalistic scenario (the maximalist scenario takes into account a rate of 100%).

**The range of values remains broadly the same except with China and the US.** As far as China is concerned, the GPA Reports methodology considers imports of 5 billion EUR whereas the tariff lines approach consider only 2 billion EUR.

**We shall nevertheless use the data of GPA reports extrapolation to avoid the distortions created by health expenditure.** For the sake of prudence, we shall consider the figure of 5 billion EUR. As far as the US is concerned, the main problem is indeed pharmaceuticals bringing a range between 3 and 13 billion EUR. Given the important difference, we preferred to take the value of 6 billion EUR of imports.

### **3- TRADE FLOWS/ EXPORTS: Measuring penetration of foreign goods and services in the public procurement market of the 12 largest trading partners (EXPORTS)**

#### **3.1-Methodological note - Estimating real and potential EU exports going to foreign public procurement markets**

##### *Theoretical framework*

To measure the impact of market access problems in international procurement markets, we shall estimate:

1 - EU exports to foreign public procurement markets that are open (either internationally or nationally) - these shall be called '**real procurement exports**'

2- EU exports that can't be realised because of existing restrictions under the domestic legislation of the main trading partners - these shall be called '**unfulfilled procurement exports**'

Based on the sector analysis explained in the problem definition, we have analysed the situation of access from a international and national legislation point of view and declared whether markets were OPEN DOMESTICALLY or NOT OPEN.

We have made additional assumptions on those exports that bypass restrictions - because of high added value and/or because of non-application of restrictions.

##### *Practical example*

#### **EU firms in the Japanese public procurement market**

The Japanese public procurement market committed internationally is estimated at 22 billion EUR. If Japan were to commit the remaining share of its public procurement market, it would open 74 billion EUR.

Imports from the EU represent 2,2% of the total Japanese demand and the import penetration rate in the public sector in Japan is 4,7% whereas the overall share of imports in Japan is 6,8%. The lower penetration rate is due to the structure of purchases of the public sector compared to the whole economy. As a result, if we apply a correcting factor of the lower penetration rate in the public sector as to the rest of the economy, we can extrapolate are expected to win 1,5% of the Japanese public procurement market.

Since Japan has committed under the GPA some 22 billion EUR, it can be extrapolated that EU firms have obtained 1,5% of this market, hence some 330 million EUR.

It is very difficult to measure whether EU companies have obtained contracts in the public procurement market of Japan that has not been committed internationally.

If the remaining public procurement market that Japan has not committed internationally were to be fully open, then we could extrapolate that EU firms would ceteris paribus obtain some 1,1 billion EUR of contracts (1,5% of that market).

If the remaining public procurement market that Japan has not committed internationally were to be fully closed (we assume that restrictions are systematically applied), then we could extrapolate that EU firms are ceteris paribus have 1,1 billion EUR of unfulfilled export opportunities.

In reality, we understand that there is some access to the Japanese public procurement market that has not been committed internationally for several potential reasons:

1. Japan has an open domestic legislation
2. Some EU exports have a strong high-tech content with firms that are monopolists in their own sector
3. Japan has restrictions but it does not apply them systematically

#### *Japanese domestic legislation*

It is therefore necessary to apply a correction to the percentages of procurement markets that have been committed internationally (for the percentages, please refer to the methodological box 3 on the size of public procurement markets in the problem definition).

Japan committed 28% of its public procurement market whereas the EU committed 70% of its procurement to Japan.

For the re-correction on domestic legislation, please refer to the methodological box 6 in the problem definition.

Japan has no restrictions in its domestic legislation for 72% of its public procurement market and the EU has no restriction either - it opens 100% of its market.

**Table 5 - Reviewed estimation of openness**

	Effective	De jure
US	34%	32%
JP	70%	23%
CA	36%	4%
KR	76%	77%
IL	75%*	75%
MX	78%	75%*
TW		
CN	0%	0%
RU	1%	0%
IN	32%	0%
BR	31%	0%
TR	17%	0%
AU	33%	0%

*High-tech exports and systematic application of restrictions*

Independently from all sector analysis, we consider that a series of high-added value sectors ultimately manage to bypass protectionist measures.

Based on the taxonomy of Peneder, established in *Sectoral Growth Drivers and Competitiveness in the European Union (2008)*, and the review of several sectors in the competitiveness studies of ENTR, we have assumed that no restrictions affected the **pharmaceutical** and **airport and postal sorting equipment** industries (cf. competitiveness analysis) - ("Bypass I" openness)

Finally, to take into account of the non-application of restrictions even in regimes where there is an obligation to discriminate, we assumed a 90% closure instead of 100%. ("Bypass II" openness) - it is symmetric to the assumed level of closure of the EU (which is "open").

**Table 6 - Bypassing barriers - real market access**

	Bypass II	Bypass	De facto	De jure
US	51%	41%	34%	32%
JP	82%	72%	70%	28%
CA	50%	40%	36%	16%
KR	90%	80%	76%	65%
IL	38%*	28%*	17%*	75%
MX	88%	78%	78%	75%
CN	24%	14%	1%	0%
RU	53%	43%	32%	0%
IN	47%	37%	31%	0%
BR	38%	28%	17%	0%
TR	50%	40%	33%	0%
AU	63%	53%	51%	0%

Ultimately, Japan opens 82% of its public procurement market to EU exports of goods and services, whereas the EU opens 100% to Japan.

Finally, the analysis cannot be consistently counterchecked with tariff lines because the breakdown of purchases by goods, services and works in third countries is unknown. Some purchases typically public maybe absorbed by grants systems or reimbursement systems. In the EU, public purchases represent 19% of GDP, yet the EU public procurement directives cover only 3% of GDP<sup>1</sup>.

#### ***Israeli offsets - methodological challenges***

Israeli offsets present a particular methodological challenge as they affect procurement committed internationally. As a result, although Israel committed 75% of its public procurement in GPA, all GPA Parties have accepted in 1994 that it applies a regime of offsets throughout its committed procurement. As a result, the effective access rate is probably 17%. Israel is therefore specific from the point of view of this methodology as it is the only country whose share of committed procurement is greater than the share of its really accessible procurement.

Additionally, one of the main achievements of the re-negotiation of GPA has been the progressive dismantling of Israeli offsets. As a result, in the forthcoming years, the real percentage will be growing to the level of internationally committed public procurement.

### **3.2 – Measuring potential additional exports created by negotiations**

Based on the pessimistic and the optimistic scenario of the baseline scenario, a series of markets is assumed as moving from "closed" to "open".

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<sup>1</sup> We made a research in the page of the main US hospitals and we did not find any reference to public procurement. The only public authority in the US in charge of purchases of pharmaceuticals is the Department of Health, and the Department of Veteran Affairs whose procurement budget of 25 billion USD represents only 1% of the whole US health expenditure.

**Table 8 - Baseline scenario: optimistic scenario**

	US	JP	CA	KR	IL	MX	CN	RU	IN	BR	TR	UA	AU
Defence	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Aerospace	-0,5	0	-1	-1	-1	0	-1	-1	0	-1	-0,5	-1	1
<b>Post &amp; Apt sorting</b>	1	1	1	1	1	1	1	1	1	1	1	1	1
Firefight & Sea Rescue	-1	0	1	0,5	1	-1	-1	-1	0	-1	-0,5	0,5	0
Construction & Dredging	0	0	1	0,5	1	0	-1	1	0	0	-0,5	0,5	0
Constr. Equipment	-1	0	1	0,5	1	0	-1	-1	0	0	-0,5	0,5	0
Railway equipment	-1	0	-0,5	0	1	-0,5	-1	-1	1	-1	-0,5	-1	0
Urban buses	-1	-1	1	0,5	-1	-1	-1	-1	0		-0,5	-1	-1
Power generation	-0,5		-0,5	0,5	1	1	-1	-1	0	1	-0,5	0,5	
Water & Sewage	-1	0	1	1	1	1	-1	1	-0,5	0	-0,5	0,5	-1
Waste mgmt & env	-1	0	1	0	1	1	-1	1	0	0	-0,5	0,5	-1
<b>Pharmaceuticals</b>	1	1	1	1	1	1	1	1	0	1	1	1	1
Medical equipment	0,5	0	1	0	1	1	-1	-1	0	0	-0,5	0,5	0
Specialised textiles	-0,5	0	1	0	1	0	-1	-1	0	0	-0,5	0,5	0
Business services	0	0	1	0	1	1	-1	1	1	0	-0,5	0,5	0
Financial services	-1	-1	1	-1	1	1	-1	1	0	0	-0,5	0,5	0
Oil, Gas Mining equipmt						1	-1	-1	0	0	-0,5		
Fixed telecom eq.		1				1	-1	-1	0	0	-0,5	0,5	
Computer & IT serv	0	0,5	1	1	1	1	-1	1	0	0	-0,5	0,5	0
Street lighting	-1	0,5	1	1	1	0	-1	-1	0	0	-0,5	-1	0
Broadcasting equip		1	1	-1	1		-1	-1	0	0	-0,5	-1	-1
Port equipment	0	1	1	1	1	-1	-1	-1	0	0	-0,5	-1	-1

**Table 9 - Baseline scenario: pessimistic scenario**

	US	JP	CA	KR	IL	MX	CN	RU	IN	BR	TR	UA	AU
Defence	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Aerospace	-0,5	0	-1	-1	-1	0	-1	-1	-0,5	-1	-0,5	-1	1
<b>Post &amp; Apt sorting</b>	1	1	1	1	1	1	1	1	1	1	1	1	1
Firefight & Sea Rescue	-1	0	1	0,5	1	-1	-1	-1	-0,5	-1	-0,5	0,5	0
Construction & Dredging	0	0	1	0,5	1	0	-1	1	-0,5	0	-0,5	0,5	0
Constr. Equipment	-1	0	1	0,5	1	0	-1	-1	-0,5	-1	-0,5	0,5	0
Railway equipment	-1	-1	-0,5	0	1	-0,5	-1	-1	-0,5	-1	-0,5	-1	0
Urban buses	-1	-1	1	0,5	-1	-1	-1	-1	-0,5		-0,5	-1	-1
Power generation	-0,5		-0,5	0,5	1	1	-1	-1	-0,5	-1	-0,5	0,5	
Water & Sewage	-1	0	1	1	1	1	-1	1	-0,5	0	-0,5	0,5	-1
Waste mgmt & env	-1	0	1	0	1	1	-1	1	-0,5	0	-0,5	0,5	-1
<b>Pharmaceuticals</b>	1	1	1	1	1	1	1	1	-0,5	1	1	1	1
Medical equipment	0,5	0	1	0	1	1	-1	-1	-0,5	-1	-0,5	0,5	0
Specialised textiles	-0,5	0	1	0	1	0	-1	-1	-0,5	-1	-0,5	0,5	0
Business services	0	0	1	0	1	1	-1	1	-0,5	-1	-0,5	0,5	0
Financial services	-1	-1	1	-1	1	1	-1	1	-0,5	-1	-0,5	0,5	0
Oil, Gas Mining equipmt						1	-1	-1	-0,5	-1	-0,5		
Fixed telecom eq.		1				1	-1	-1	-0,5	-1	-0,5	0,5	
Computer & IT serv	0	0,5	1	1	1	1	-1	1	-0,5	-1	-0,5	0,5	0



Street lighting	-1	0,5	1	1	1	0	-1	-1	-0,5	-1	-0,5	-1	0
Broadcasting equip		1	1	-1	1		-1	-1	0	-1	-0,5	-1	-1
Port equipment	0	1	1	1	1	-1	-1	-1	-0,5	-1	-0,5	-1	-1

This, in turn, affects the percentages of the real opening of several markets, and thus in concrete exports (some 0,8 billion EUR to 1,2 billion EUR). The calculation of the exports is derived from the additional markets multiplied by the percentage of overall exports corrected by public consumption.

The sectors of these additional exports are known (cf. tables supra) as their exports per worker. If we table on an unaltered ration of exports per worker, then we obtain the number of jobs created.

To complete the analysis, it is possible to simulate:

(a) A full opening of public procurement markets. In this context, based on this simulation, up to 3,7 million jobs could be created.

**Table 10 - Full opening (Optimax scenario)**

Optimax

	US	JP	CA	KR	IL	MX	CN	RU	IN	BR	TR	UA	AU
Defence	1	1	1	1	1	1	1	1	1	1	1	1	1
Aerospace	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>Post &amp; Apt sorting</b>	1	1	1	1	1	1	1	1	1	1	1	1	1
Firefight & Sea Rescue	1	1	1	1	1	1	1	1	1	1	1	1	1
Construction & Dredging	1	1	1	1	1	1	1	1	1	1	1	1	1
Constr. Equipment	1	1	1	1	1	1	1	1	1	1	1	1	1
Railway equipment	1	1	1	1	1	1	1	1	1	1	1	1	1
Urban buses	1	1	1	1	1	1	1	1	1	1	1	1	1
Power generation	1	1	1	1	1	1	1	1	1	1	1	1	1
Water & Sewage	1	1	1	1	1	1	1	1	1	1	1	1	1
Waste mgmt & env	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>Pharmaceuticals</b>	1	1	1	1	1	1	1	1	1	1	1	1	1
Medical equipment	1	1	1	1	1	1	1	1	1	1	1	1	1
Specialised textiles	1	1	1	1	1	1	1	1	1	1	1	1	1
Business services	1	1	1	1	1	1	1	1	1	1	1	1	1
Financial services	1	1	1	1	1	1	1	1	1	1	1	1	1
Oil, Gas Mining equipmt	1	1	1	1	1	1	1	1	1	1	1	1	1
Fixed telecom eq.	1	1	1	1	1	1	1	1	1	1	1	1	1
Computer & IT serv	1	1	1	1	1	1	1	1	1	1	1	1	1
Street lighting	1	1	1	1	1	1	1	1	1	1	1	1	1
Broadcasting equip	1	1	1	1	1	1	1	1	1	1	1	1	1
Port equipment	1	1	1	1	1	1	1	1	1	1	1	1	1

(b) An opening by trade partners that only matches their offensive interests (the grey squares with 1 refer to the markets where trading partners have offensive interests and that

would be assumed in this scenario to be "opened"). This would have an effect on exports of 4 billion EUR and create 700.000 jobs.

**Table 11 - Openings in offensive interests of trade partners**

	US	JP	CA	KR	IL	MX	CN	RU	IN	BR	TR	UA	AU
Defence	1	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	1	-1
Aerospace	1	1	-1	1	-1	0	1	1	1	-1	-0,5	1	-1
<b>Post &amp; Apt sorting</b>	1	1	1	1	1	1	1	1	1	1	1	1	1
Firefight & Sea Rescue	-1	0	1	0,5	-1	-1	-1	1	-0,5	-1	-0,5	0,5	0
Construction & Dredging	0	1	-1	1	-1	0	1	1	-0,5	1	1	0,5	0
Constr. Equipment	-1	1	0	1	-1	1	1	-1	-0,5	-1	-0,5	0,5	0
Railway equipment	-1	1	-0,5	1	-1	-0,5	1	-1	-0,5	-1	-0,5	-1	0
Urban buses	-1	-1	0	0,5	-1	-1		-1	-0,5	1	-0,5	-1	-1
Power generation	1	1	-0,5	1	-1	1	1	-1	1	-1	-0,5	0,5	0
Water & Sewage	-1	0	-1	1	-1	1	-1	1	-0,5	0	-0,5	0,5	-1
Waste mgmt & env	-1	0	-1	0	-1	1	-1	1	-0,5	0	-0,5	0,5	-1
<b>Pharmaceuticals</b>	1	1	1	1	1	1	1	1	1	1	1	1	1
Medical equipment	1	1	-1	0	1	1	-1	-1	-1	-1	-0,5	0,5	0
Specialised textiles	-0,5	0	0	0	-1	0	-1	-1	-1	-1	-0,5	0,5	0
Business services	1	0	0	0	-1	1	-1	1	1	-1	-0,5	0,5	0
Financial services	1	1	1	-1	-1	1	-1	1	-1	-1	-0,5	0,5	0
Oil, Gas Mining equipmt	0	0	0	0	0	1	-1	-1	-1	-1	-0,5	0	0
Fixed telecom eq.	0	1	0	0	0	1	1	-1	-1	-1	-0,5	0,5	0
Computer & IT serv	1	0,5	0	1	-1	1	1	1	1	-1	-0,5	0,5	0
Street lighting	-1	0,5	-1	1	0	0		-1	-1	-1	-0,5	-1	0
Broadcasting equip	0	1	1	-1	1	0		-1	-1	-1	-0,5	-1	-1
Port equipment	0	1	-1	1	-1	-1	1	1	-1	-1	-0,5	-1	-1

#### **4- EMPLOYMENT**

An analysis based on a standard methodology based on symmetric EU27 (and individual) Member States I-O tables (developed by the IPTS/Seville for Eurostat) to identify and quantify all downstream jobs associated with the production of extra-EU exports shows that in 2007 the whole of EU sales to the rest of the world (worth around 1382 bn Euros) were associated with 21.4 millions jobs EU-wide. Note that the aim of the methodology is to capture not only the jobs associated with the production of the exported goods and services but all employment in downstream sectors that are embodied in sales to foreign markets. On the basis of the above and applying the same ratio of jobs per billion of exports, that would suggest that 4 bn Euros of additional exports might be associated with around 60.000 jobs in the EU27.

#### **5- Leverage index**

##### **Methodological note - How to estimate leverage?**

##### *Theoretical framework*

In public procurement negotiations, each country seeks to maximise its potential exports of goods and services in the procurement market of the country with whom it negotiates.

In this context, countries negotiate the access (1) to the procurement of specific public authorities or state-owned companies for (2) specific goods and services for (3) contract values above a certain value (the so-called thresholds).

Of course, each country has a specific industrial structure with a particular pattern of industrial sectors that weight in its exports (the so-called 'offensive interests' of a country).

Similarly, public authorities have a specific pattern of consumption that reflects the type of public services (cf. COFOG classification) they deliver. For instance, they tend to buy construction services for infrastructure works, pharmaceuticals (hospitals) and rolling stock (railway and urban transport). At the same time, they are not particular purchasers of domestic appliances or food.

Countries that have become Parties of GPA or which negotiated public procurement chapters in FTAs have partially opened their procurement market; i.e. they have selected specific entities and goods/services whose procurement is open to foreign goods and services (the so-called 'market access commitments').

The challenge of each international procurement negotiation is therefore to secure that the exports of its offensive interests are covered by the 'market access commitments' of their trading partner.

Let's take a country A specialised in pharmaceuticals and a country B specialised in railway equipment.

If A and B negotiate a first international procurement agreement and mutually open their pharmaceutical procurement markets, then A will meet its offensive interests and increase its exports, whereas B will not be able to export its railway equipment (we assume that both A and B reflect their international commitments in their national legislations).

If A and B re-negotiate their agreement, B will pressure A to open its railway procurement market. Still, as A has satisfied its exports of pharmaceuticals, it may have no incentives to open its railway procurement, in particular if wishes to protect its ailing railway equipment industry.

However, if A in spite of its international commitments has left its entire procurement market, country B will still have access to the procurement of country A for railway equipment. Although B knows country A can at any moment close its railway equipment market, B will consider that it has sufficient access to country A.

To measure the leverage that each country has in a negotiation it is necessary to compare the relative size of the potentially unfulfilled exports resulting from existing protectionist measures and their application.

Application - Example: EU and Japan mutual exports
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Let's assume that the EU public procurement market is fully open and the EU imports 2 billion EUR from Japan, out of which 1,6 billion EUR go through GPA commitments and 0,4 billion EUR go through markets non-committed in GPA.

Let's assume that the Japanese public procurement market is open in those areas that Japan has committed in the GPA and is fully closed in those areas that Japan has not committed internationally. We also assume that Japan applies systematically its restrictions (this is to be understood as an example only).

As a result, 0,3 billion of EU exports go through Japan's existing commitments, whereas 1,1 billion EUR of exports are unfulfilled because Japan applies systematically its restrictions.

In this context:

Ratio of Japanese potential exports affected by restrictions in the EU public procurement market: 0% (potential exports= real exports)

Ratio of EU potential exports affected by restrictions in the Japanese public procurement market: 77% (potential exports= 1,1 billion EUR; real exports=0,3 billion EUR).

Leverage of the EU vis-à-vis Japan=  $0\%/77\%=0$

If the leverage ratio is equal to 0% the EU has no leverage

If the leverage ratio is equal to 100%, both trading partners have the same leverage

If the leverage ratio is above 100%, the EU has a greater leverage.

## **6- Public finances (and innovation)**

### *Linking procurement and savings*

In 2008, a preliminary work was performed on the link between the number of bidders and the relationship between the estimated contract value and the actual contract value. The results of this study concluded to average savings of 5-8%, ultimately resulting therefore in savings of 20-30 billion EUR.

Although more sophisticated analyses were performed in the context of the evaluation of the public procurement directives, they did not come to profoundly divergent conclusions. The savings of the directives are assumed to be of 5% (i.e. in the area of 20 billion EUR)

The first analysis has the advantage of providing a straightforward link between the level of competition and these "estimated savings" based on **2007** data. Moreover, it is based on the analysis of 13000 contract award notices. Since it could eventually overestimate the potential savings resulting from procurement, it will certainly not underestimate the negative effects on public finances of a reduced setting of competition.

Further to the interlink analysis, we tested a logarithmic regression ( $\text{Savings} = k \cdot \text{LOG}(\text{BIDS})$ ), and obtained the following results:

- *Log(BIDS) was found to be again a significant variable (p-value at 0%)*
- $k=0,15$  (the first additional offer will create a saving of 4,5%, the second additional offer will create a saving of 2,5%, ...)
- adjusted R-square= 61% (the linear regression provided for a R-square=52%)

The analysis can be provided upon request.

#### *Analysis in the context of this impact assessment*

The idea is to measure the "savings loss" from the reduction of competition resulting from the EU restrictions. The "savings loss" is the reduction of savings because of the reduction of competition.

Example:

If the number of bids diminishes from 5 to 4, then:

5 bidders - saving=10,4% ( $=0,15 \cdot \text{LOG}(5)$ )

4 bidders - savings=9% ( $=0,15 \cdot \text{LOG}(4)$ )

"Savings loss"= 1,4% (the difference between 5 and 4 bidders)

If the market impacted by the measure is worth 5 billion EUR, then the impact is 1,4% of 5 billion=80 million EUR).

Public finances and the GDP

Of course, the impacts on the trade balance caused by retaliation have to be measured in the whole economy. This is further detailed in the impact on the overall economy (cf. infra).

#### *Impact on innovation*

The impact on innovation has been made from the starting point that the reduction of competition impacts also competition.

Yet, what matters most is avoiding that competition falls in the trap of oligopoly or monopoly. If, say, a market has generally 4 bids; this instrument may reduce competition to 3 bids - making therefore collusion less costly in terms of transaction costs and signalling. This would even worse when going from 3 bids to 2 bids.

Therefore, the best simulation to measure negative impacts on innovation is obviously to analyse the situation from the perspective of the current level of competition.

We have therefore reviewed the number of bidders per CPV sector to identify those markets where competition is small (less than 3 bids).

### **7- Administrative burden**

For the calculation of the administrative burden we have used the Standard Cost Model.

### *Cost of information obligations*

The cost of certificates of origin was taken from the impact assessment on Rules of origin for the Generalised System of Preferences (GSP), where they were assumed to cost 5 EUR.

For notifications, the cost incurred has been calculated on the basis of an estimation provided by contracting authorities themselves in the consultation, where most respondents indicated half a day in EFT (thus 240 minutes).

### *Cost of labour*

We have assumed 22 EUR/h as an average EU salary.

### *Frequency*

The cost of the procedure has been calculated on the basis of the number of procurement procedures impacted by the option, and if the obligation fell on the winner or on all the participants (in which case, we used 5 bidders, which happens to be the average number of bidders).

*Cost of opportunity if delays*

We have calculated a cost of opportunity for businesses based on average interest rate of 3% of the contract value.

We have not been able to estimate the cost of opportunity for contracting authorities that have to wait.