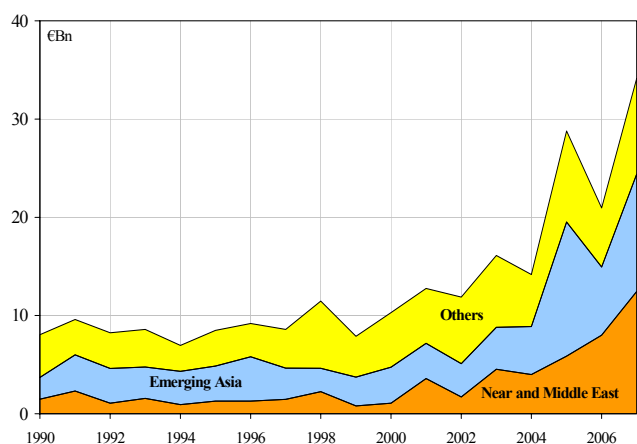


"Large contracts" signed by French firms in the emerging countries

- A transaction is considered to be a "large" contract when the French share of it exceeds €3 million. Large civil contracts signed by French firms in the emerging countries are reported on a quarterly basis by the international network of Economic Missions of the Ministry for the Economy, Industry and Employment. These major contracts have a direct impact on French exports, and in particular on their breakdown by sector and geographical region. Their total amount was relatively stable in the 1990s, but it has accelerated significantly since 2000. They totalled €35 billion in 2007 (representing more than a third of total exports to the emerging countries). This total is increasingly concentrated on a handful of very large amounts.
- Aerospace contracts (around 40%) have increased their share in recent years. Apart from aerospace, construction and energy facilities operating contracts have grown in importance in response to the need of non-oil producing countries to diversify their energy sources (nuclear power), and also in answer to producer countries' infrastructure needs.
- Major contracts give rise to exports of capital goods. The lead time between signature of the contract and effective delivery can vary, from 1 to 2 years on average, not including aerospace where deliveries can take several years. Major contracts and exports of infrastructures are helping to raise the value added of our exports to these countries, contributing to a welcome redirection of our exports towards the most dynamic regions of the world.
- Emerging Asia has long been the number 1 client region for French firms. The Gulf States have grown their purchases significantly in recent years and have matched emerging Asia for the past two years.
- The process of catching up by the emerging countries, their infrastructure needs, and more generally the growing prominence of energy and environmental questions, all suggest there is considerable potential in the coming years.

This study was prepared under the authority of the Treasury and Economic Policy General Directorate and does not necessarily reflect the position of the Ministry for the Economy, Industry and Employment.

Trends in French "large contracts" by emerging region



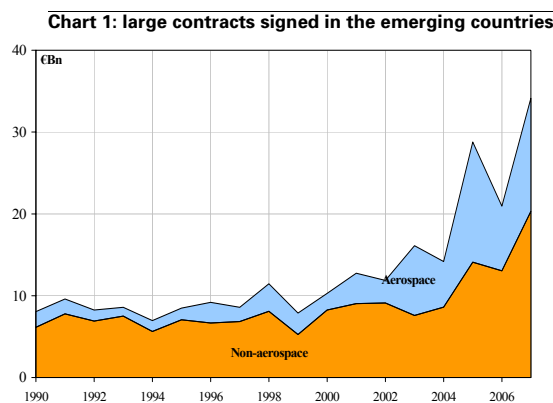
Source: DGTPE, Economic Missions.

The Ministry for the Economy, Industry and Employment's network of Economic Missions produces statistics on "large civil contracts" signed by French firms in the emerging countries. The data collected correspond, as far as possible, to the share of the total amount of the contract that will give rise to exports from France, *i.e.* the "French share" of the contract. By default, however, the Missions sometimes collect data on the total share due to French firms (boxes 1 and 2).

The total amount of these large contracts in the emerging countries was relatively stable at a little less than €10 billion in 1990s. The figure has accelerated significantly since 2000 (chart 1), growing at an annual rate of around 25% since that date. 2007 was a record year, with €34.5 billion in contracts signed¹. Total French goods exports in 2007 came to €400 billion, with €95 billion to the emerging countries alone.

The surge in the amount of large contracts concerns not only aerospace but the other civil sectors as well. However, since 2005, aerospace contracts have expanded to account for around 40% of all contracts recorded each year, compared with 15 to 30% previously.

The study presented here discusses the main results regarding large contracts signed by French firms in the emerging countries. It may be worthwhile considering these contracts in the aggregate in order to see to what extent this information sends a signal concerning our exports. The study highlights the fact that large contracts act as a springboard for French firms in the emerging countries and are contributing to the redirection of our exports towards these fast-growing regions.



Source: DGTPE, *Economic Missions*.

Box 1: the "large contracts" survey

The "large contracts" survey is an original survey established by the Direction des Relations Économiques Extérieures (DREE- Directorate of Foreign Economic Relations) in 1979. The international network of the French Ministry for the Economy, Industry and Employment (the Economic Missions operating in French Embassies abroad) compiles quarterly data on the large civil capital goods contracts signed. The missions are surveyed regarding all civil sectors of activity.

The figures compiled for large contracts correspond to the "French share" of these contracts, in other words the share giving rise to exports from France. When this share is unknown, the total amount due to the French firm is recorded. A transaction is considered to be a "large" contract when the French share exceeds €3 million. This threshold has remained unchanged since 1992. It was increased to €10 million in the third quarter of 2007, marking a break in the definition of the survey's scope (however, the number and value of contracts comprised between €2 and €10 million is negligible in relation to the total).

Since 2007, the survey has covered the emerging countries in the broad sense of the term^a, due to the increasing difficulty of compiling statistics regarding large contracts in the developed countries in recent years. Reasons for this include:

- 1/ It has become difficult to compile comprehensive data in large countries because the information is not necessarily public or known to the Embassies, and because firms are increasingly reluctant to disclose information regarding their transactions;
- 2/ In the emerging countries, conversely, Embassies and Economic Missions sometimes play a part in the negotiation of large contracts and keep good track of them;
- 3/ From a statistical point of view, the emerging countries had come to account for a majority of large contracts: they represented 50% of large contracts for the period 1990-1999, and 60% from 2000 onwards.

For each country, the main data compiled consists of: the "French share" of the contract signed, the sector of activity and the firms involved in the contracts. For Airbus orders, the "French share" refers to the share produced in France (which varies depending on the model). Only contracts that have been "signed" are taken into account; "memorandums", options and new partnerships formed do not qualify as large contracts.

Several factors account for the differences in the above relative to other announcements of large contracts often carried in the press, especially on occasion of official bilateral visits:

- military contracts may be included in these announcements even though they do not come within the scope of this survey;
- total amounts may be announced instead of the "French shares" of contracts;
- trade options and amounts relating to exclusive negotiations may be included even though they are not included in the survey.

a. Overall, the countries tracked concern the whole world except: in Europe, the 15 member European Union together with Switzerland and Norway (the new European Union Member States are thus included in the survey); in North America, the United States and Canada; and in Asia-Oceania, Japan, South Korea, Australia and New Zealand.

(1) These data are subject to regular revision insofar as estimates of the "French share" are liable to refinement.

1. Large contracts signed in the emerging countries have taken off since 2000, with a growing concentration on contracts for very large amounts

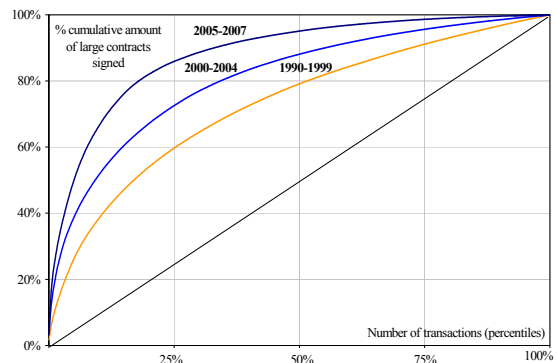
There is an increasingly pronounced concentration of French large contracts on contracts for very large amounts: on average, the share of the ten largest contracts has increased from less than 30% of the total value of contracts signed each year over the period 1996-2002 to more than 40% from 2003 onwards.

Chart 2 illustrates this growing concentration on contracts for very large amounts since 2000: between 2005 and 2007, 25% of all contracts signed (around 80 contracts a year) represented 86% of the total value of all large contracts, versus only 73% for the period 2000-2004, and 60% for the period 1990-1999. **This growing concentration on ever-larger contracts is tending to raise the average value of contracts signed.** That is because the average value (chart 3) of €10 million-plus contracts has risen in all sectors. This average has been highly volatile in aerospace, especially at the end of the period, rising from €86 million between 1990 and 1999 to €169 million between 2000 and 2007 and, outside of aerospace, from €35 million between 1990 and 1999 to €67 million between 2000 and 2007 (€105 million in 2007).

Meanwhile, trends in the number of transactions recorded each year depend on the sector: whereas, outside of aerospace, this number has held relatively steady (between 130 and 200 contracts annually, averaging around 160 contracts a year), the number of aerospace contracts has grown substantially, especially since 2003, rising from around twenty a year before 2002 to nearly 50 in 2007. **Overall, especially outside of aerospace, the surge in large contracts since 2000**

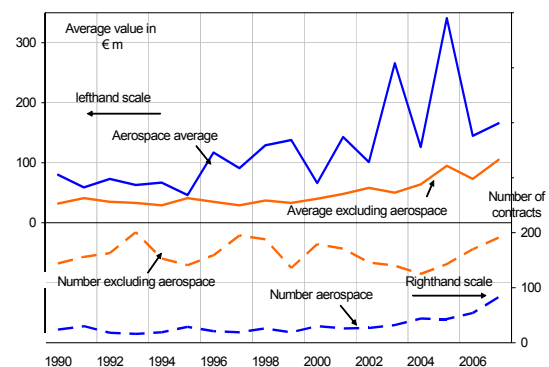
has owed more to the increase in the average value of contracts signed than to the growth in their total number.

Chart 2: concentration of large-value contracts



Source: DGTPE, *Economic Missions*.

Chart 3: number of transactions of over €10 m Ministry for and average value by category



Source: DGTPE, *Economic Missions*.

2. Large contracts for energy plant construction are up sharply in recent years

The pronounced surge in large contracts for capital goods excluding aerospace in recent years stems from the growing importance of contracts related to the energy sector, which notably comprise the construction of conventional and nuclear electric power plants. Over the long period, the sector ranks first among large non-aerospace contracts, its share ranging between 30 and 45%. This share has hovered around 50% since 2005 (averaging nearly €8 billion a year, compared with less than €3 billion over the period 1990-2004). Within this sector, which concentrates the largest contracts in value terms, Areva signed a particularly large contract in China at the end of 2007 to build two EPR nuclear power plants worth

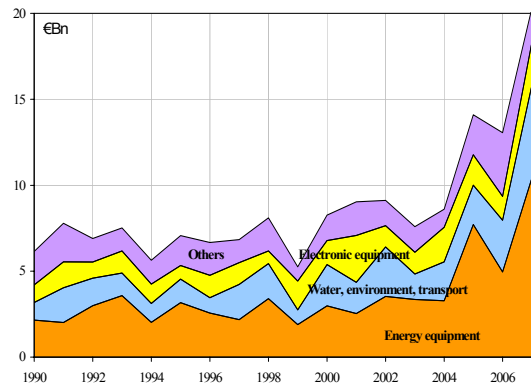
a total of €8 billion. Also worth mentioning among the largest contracts was the launch by Total in 2006 of the project to build and operate an oil refinery in Saudi Arabia, and the construction by TECHNIP, in a venture with other foreign firms, of a gas treatment unit in Saudi Arabia in 2005, and in Qatar in 2006.

Contracts for activities relating to water, the environment and transport² account for slightly over 20% on average each year (approximately €2 billion) of large contracts excluding aerospace, this share remaining more or less stable since 1990. The other sectors have diminished in relative terms, as in the case of electronic equipment³, whose share has fallen from slightly under 20% between

1990 and 2004 to a little over 10% since 2005, and of other sectors⁴, whose share has dwindled from 22% between 1990 and 2004 to 18% since 2005.

Most of the large contracts are generally signed by a handful of very large French firms well established in their respective sectors. Alcatel, Alstom, Areva, Bouygues, Dragages, ECL, EDF, Fives (FCP-Ciment, Solios), Sagem, Suez, Technip, Thales, Total, Véolia and Vinci are the names frequently cited in the context of large contracts for large amounts in recent years.

Chart 4: trends in large contracts by sector



Source: DGTPE, *Economic Missions*.

3. Large contracts translate into exports after a certain period of time that varies depending on the sector

Exports of goods generated by large contracts may come within a variety of sectors. However, the great majority of them are classified as capital goods, which account for a quarter of French goods exports.

3.1 The case of large aerospace contracts

The relationship between large contracts and exports in this sector is simple and direct: in so far as the figures recorded correspond precisely to the share to be manufactured in France, we ought to find the identical amount in figures for actual exports. That is indeed what is observed in terms of the trend (charts 5 and 7): over the last 10 years as a whole, cumulative deliveries to the rest of the world total slightly under €122 billion and cumulative orders slightly over €122 billion.

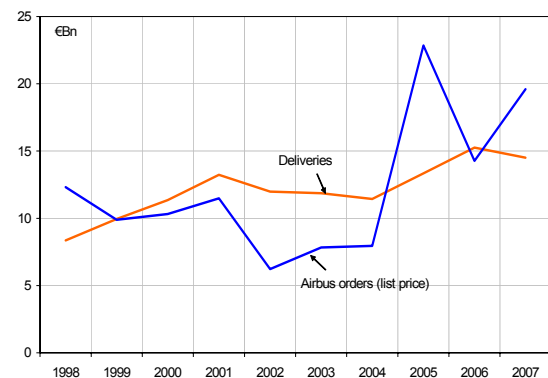
The main difficulty lies in the lead time between signature of contracts in a given year and the corresponding exports. This lead time essentially varies depending on the model exported, on the production line's order backlog, and the moment in the year at which the contract is signed. Whatever the case, these parameters are not stable over time: models and the structure of orders for each model evolve over time. Moreover, production lead times have lengthened.

The average number of aircraft ordered annually from Airbus has grown from 400 over the period 1998-2004 to

1,000 for the period 2005-2007. Delivery times have lengthened from around 1 to 3 years a few years ago, to something more like 5 to 6 years for models ordered since 2006. The cumulative backlog for Airbus at end-2007 totalled 3,421 aircraft representing six years of production.

Barring unforeseen events, aerospace exports in terms of "French share" can therefore be expected to remain buoyant for the next six years. For 2008 in particular, we can expect a moderate increase relative to 2007 given the volume of deliveries scheduled.

Chart 5: Airbus deliveries from France and French share of orders intended for the world as a whole



Source: French Customs & Excise, Airbus, DGTPE.

- (2) These activities comprise the construction of wastewater and waste treatment plants, roads, railways, various public works, shipbuilding and the construction of other transport equipment.
- (3) Non-defence surveillance equipment and the supply of communication equipment, such as extensions to telecommunication networks or communication satellites, for example.
- (4) These consist of: 1/ one-half, industrial manufacturing complexes, mainly the supply of production lines, 2/ 20%, construction of buildings and interior fixtures and fittings (hotels, offices and hypermarkets), 3/ 20%, services (operation, maintenance and facilities management, project and process engineering services, etc.), and finally 4/ 10%, contracts for machine tools and other specialised machinery.

Box 2: large military contracts

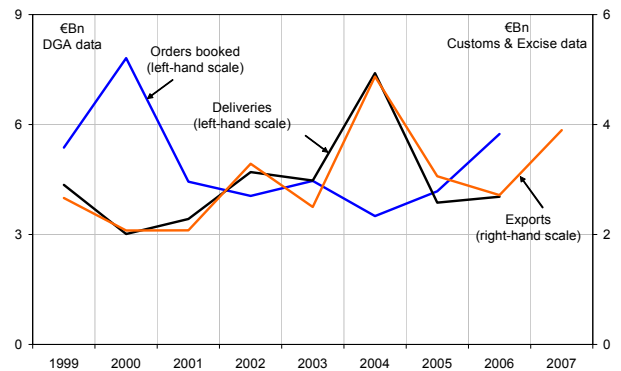
For reasons connected with the confidentiality of the figures and their specific nature in the treatment of trade statistics (no country-by-country breakdown of the figures is disclosed publicly), the survey of large contracts does not cover trade in military hardware. French exports of military hardware (representing slightly under 1% of French exports) vary fairly erratically. They have risen over the long period, but the trend is not very robust. French exports of military hardware have averaged around €3 billion a year since 1990. Also since 1990, because imports have generally amounted to slightly less than €1 billion on average each year, there has been a surplus of a little over €2 billion. Recent years have been no exception to the rule, with average annual exports slightly higher, and imports also.

The Délégation Générale pour l'Armement (DGA—the French weapons procurement agency) publishes statistics on arms deliveries together with "orders booked", the latter being akin to our "large contracts". The DGA statistics are broader in scope than those published by the French Customs & Excise.

Deliveries as defined by the DGA are generally €1 to 2 billion higher than "Customs" exports because the scope of goods differs slightly, and above all due to the inclusion of services and the cost of services associated with military deliveries in the DGA figures. Commentary on these data can be found on the DGA website:

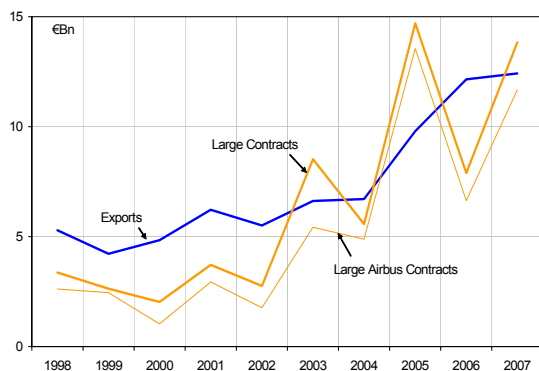
<http://www.defense.gouv.fr/dga>

Chart 6: military hardware exports, deliveries and orders booked



Source : DGA, French Customs & Excise.

Chart 7: large aerospace contracts and exports to the emerging countries



Source: Airbus, DGTPE, Economic Missions.

This reasoning, which is valid for all exports, also holds for exports to the emerging countries. As can be seen from chart 7, most of the large aerospace sector contracts, to the emerging countries notably, consist of Airbus orders⁵. There was a clearly visible "leap" in orders from emerging countries in 2005, with a seesaw profile thereafter: orders were down in 2006, then bounced back in 2007. The growth in orders in recent years should lead to growth in French exports.

3.2 Large contracts in the other sectors

Excluding aerospace, the linkage between the total amount of large contracts and potential exports of goods from France is complex and often hard to evaluate. Only a fraction of the total amount signed by the firm will actually translate into exports of goods from France⁶. This fraction depends on the type of contract signed, every type of case being possible, depending on the sector, the content of the transaction in terms of services, the organisation of the firm, the nature of the contract, the characteristics of the host country, etc. A significant proportion of French exports stems from the remuneration of services included in these large contracts, e.g. consulting, feasibility studies, project engineering, etc.

The amounts recorded in the survey normally correspond to the "French share", but data need to be interpreted with care insofar as this share can sometimes be overestimated. It should be borne in mind, however, that when this share is unknown the total amount attributable to the French firm is the amount recorded. It is possible, there-

- (5) The difference between aerospace as a whole and Airbus is accounted for by other types of aircraft (business aircraft), helicopters, satellites, etc.
- (6) When a French firm signs a contract, the firm concerned is generally part of a large "group" of companies, with a subsidiary in the client country (or that creates a subsidiary for the purpose). Certain works carried out in order to execute the investment locally may be directly managed by this subsidiary. The French firm also subcontracts a certain number of important works to other firms, which may or may not be subsidiaries of the "group" and which may or may not be French (client country or third country). In all, the goods necessary for the execution of these works may therefore be either supplied on the spot, imported from France, or imported from other countries.

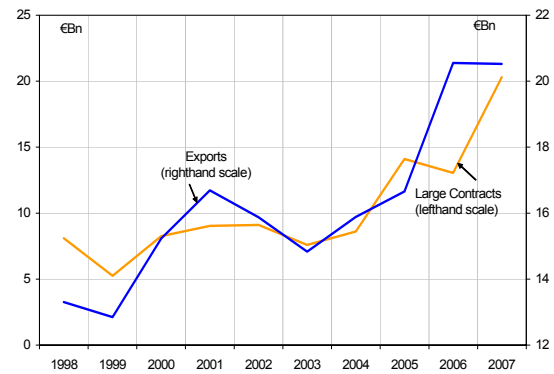
fore, that the aggregated amounts shown tend to overstate the actual "French share" of the contracts recorded.

The lead time between "large contract" and actual delivery varies greatly. It may range from a few months to 2 to 3 years for the bulk of the deliveries provided for in the contracts, with an average of approximately a year and a half. The initial down payments and hence the initial exports are made in payment for services (feasibility studies, project engineering, etc.). As for capital goods and other goods, it all depends on the type of equipment concerned, particularly in the case of standard products or more one-off fabrications. From a sector point of view, telecommunications and signalling equipment, together with oil infrastructure equipment, may be delivered faster than equipment connected with the installation of factories or nuclear power plants, or certain rail transport equipment such as trams or rail lines.

Chart 8 illustrates the linkage between large contracts and exports for capital goods other than aerospace. The profile of the two lines is the same. These aggregate data may suggest that the average lead time between the signature of a large contract and first equipment delivery is relatively short, less than a year at the beginning, and longer than a year at the end of the period. For the 10

years elapsed, if we reason on the basis of a one-year lead time between contract signature and the exports, we find that the value of large non-aerospace contracts to the emerging countries has grown from €8 billion to €13 billion over the period 1998-2006, representing an increase of 61%, which is practically identical to the figure recorded for non-aerospace capital goods to the emerging countries (+60%) between 1999 (€13 billion) and 2007 (€21 billion). Excluding aerospace, the large contracts recorded represent on average approximately half of all capital goods exports to the emerging countries.

Chart 8: exports of capital goods and large contracts (excluding aerospace), to the emerging countries



Sources: French Customs & Excise, DGTPE.

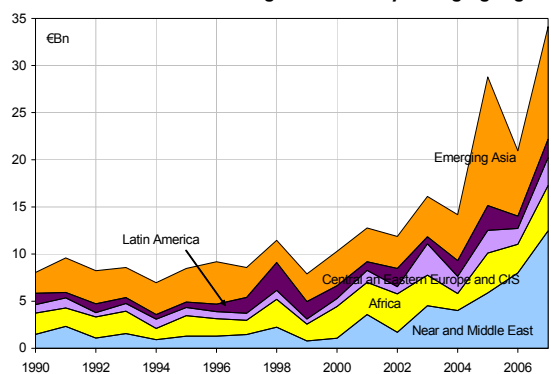
4. Large contracts are an accelerator for French exports to the emerging countries, especially Asia and the Near and Middle East

The total amount of contracts signed in emerging Asia and the Near and Middle East has risen sharply since 2005 (the average value of contracts signed each year has more than trebled in the two regions between the periods 1998-2004 and 2005-2007), which has enabled them to confirm their ranking as the number one client regions for French firms (charts 9 and 10).

Emerging Asia remained the "number one client region" from 1990 to 2005. However, the vigour of demand from the Gulf countries thanks to the recent spurt in oil revenues enabled them to overtake Africa in the early 2000s and to capture the number one position from emerging Asia in 2006, maintaining a short lead in 2007. While these two major regions now rank roughly first equal (with a share of around 35%), they are not leaders in the same sectors: **emerging Asia remains the number**

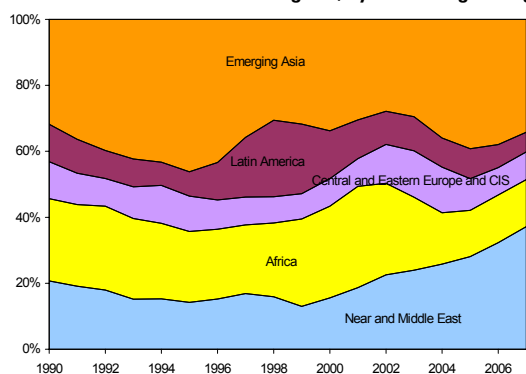
one client region for aerospace, and the Near and Middle East has become the number one client region for non-aerospace goods.

Chart 9: large contracts by emerging region



Sources: DGTPE, Economic Missions.

Chart 10: share of each region (3-year moving average)



Sources: DGTPE, *Economic Missions*.

Conversely, the share of Africa, which is the French firms' number 3 client, has fallen (with an average share of 14% since 2005, versus 24% between 1998 and 2004). Central and Eastern Europe and Latin America account for a limited share of contracts and are down since 2005: their shares have dropped from slightly over 10% each between 1998 and 2004 to under 8% since 2005.

4.1 Emerging Asia

Aerospace accounts for the great majority of contracts signed (70% over the period 2005-2007). They are also for larger amounts than for non-aerospace contracts (€215 million on average for Emerging Asia, versus €63 million for non-aerospace). French firms' number 1 client country in this region (see table 1, p.8) is China (more than €13 billion in contracts signed between 2005 and 2007). This is followed by India, Singapore, Malaysia, Hong Kong and Vietnam.

4.2 Near and Middle East

All of the main clients of French firms in the Near and Middle East are oil exporters. Partly because of the specialisation of these countries' exports, nearly 40% of the value of large contracts signed in this region between 2005 and 2007 concerns the energy equipment sector. This is followed by aerospace (25%⁷). Altogether, Qatar and Saudi Arabia lead the way, followed closely by the United Arab Emirates, with Kuwait and the Sultanate of Oman further behind.

4.3 Other regions

The main clients on the continent of Africa are also oil and gas exporters, *i.e.* Nigeria, Algeria and Libya, with which

nearly half of the contracts signed are energy-related. In North Africa, Morocco (€700 million over the period 2005-2007) and Tunisia (€300 million) rank 4th and 7th respectively. South Africa is only marginal, with €200 million, but a large contract signed by Alstom in February 2008 will clearly modify this ranking.

Russia and Ukraine in particular stand out among the Central and Eastern Europe and CIS group of countries, representing slightly under 40% of the total value of large contracts signed in the region between 2005 and 2007, representing nearly €3 billion out of a total €7 billion. The 12 new European Union Member States cover more than half, *i.e.* nearly €4 billion, of which €2 billion for Hungary. Central Asia accounts for a modest share, with a cumulative €200 million in contracts over the period 2005-2007.

In Latin America, Brazil, Mexico and Chile are the French firms' main clients. Over the period 2005-2007, Argentina occupies a marginal position with a cumulative amount of less than €100 million, but this ranking should improve in 2008 following the contract signed with Alstom for the construction of a high speed rail link between Buenos Aires and Cordoba.

French exports to emerging Asia and the Gulf States reflect the growing importance of large contracts in trade ties with these countries. French exports to China and India (cumulative) trebled and the share of these countries in French exports grew from 1.4% to 3.2% between the late-1990s (1998-2000) and 2007. The share of capital goods in these exports has risen from 53% in the late-1990s to 58% in 2007. In the Gulf States, which have more than doubled their share of French exports (from 1.7% in the late-1990s to 2.5% in 2007), the share of capital goods has risen too (from 39% to 44%).

Consequently, in both emerging Asia and in the Gulf, large contracts and deliveries of capital goods appear to be driving up all French exports to these countries. In that sense, large contracts represent an essential factor redirecting French exports towards the world's most dynamic regions and towards the sectors of the future.

Nicole MADARIAGA, Raymond de PASTOR

(7) Whose relatively large share owes much to 2007 (nearly €6 billion).

Table 1: cumulative amounts between 2005 and 2007 of contracts signed (in €Bn) and shares of each region in the total

Emerging Asia (38.8%)		Near and Middle East (31.4%)		Africa (14.4%)		Central and Eastern Europe and CIS (8.4%)		Latin America (7.0%)	
China	13.5	Qatar	7.2	Nigeria	3.0	Russia	2.2	Brazil	2.3
India	7.7	Saudi Arabia	7.1	North Africa	3.4	Hungary	2.0	Mexico	1.0
Singapore	3.5	United Arab Emirates	5.3	- of which Algeria	2.5	Ukraine	0.6	Chile	0.9
Malaysia	3.1	Kuwait	2.3	Libya	1.5	Others	2.3	Others	1.7
Hong Kong	1.1	Oman	1.7	Rep. of Congo	0.8				
Vietnam	1.0	Others	2.7	Others	3.4				
Others	2.6								

Over the period 2005-2007, the 10 leading client countries (of which 7 are in Asia / Near and Middle East), in bold in this table, account for two-thirds of the total value of large contracts signed by French firms in the emerging countries.

Source: DGTPE, *Economic Missions*.

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