

Cables in Oil and Gas Activities



Angelo Paci



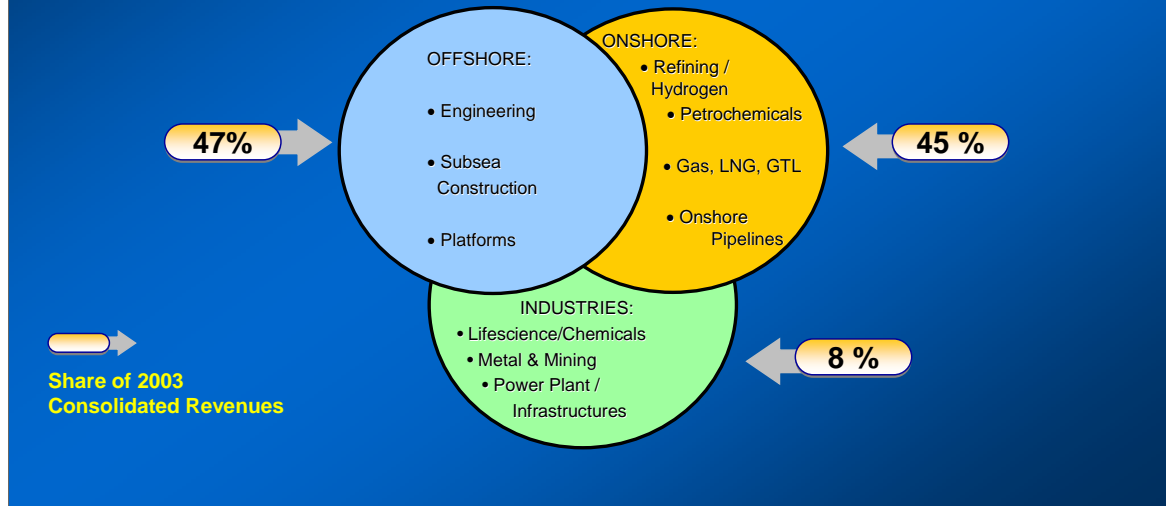
Ladies and gentlemen,

My presentation will consist of two parts.

In the first part I will inform you about Technip (in short TP) and in the second part) I will talk about the global procurement organization and the cables in Engineering, Procurement and Construction (EPC) contracts.

TECHNIP IN A SNAPSHOT

- A leading provider of engineering, technologies and construction services for the oil & gas, petrochemical and other industries
- Listed on Euronext Paris and NYSE
- Staff: 19,000 people



The company is organized into 3 branches:

The Offshore branch represents 47% of the revenues and comprises 3 main activities: Engineering & Project Management for the design & construction of platforms. A fleet of 14 vessels specialized in the sub-sea pipelay, sub-sea construction and maintenance services.

Manufacturing units for a number of sub-sea products mainly: Flexible pipes, Umbilicals, Remotely Operated Vehicles (ROV) to repair and search and fetch black boxes. 2 construction yards. 3 Spoolbases, where rigid pipes up to 16" diameter are welded end to end before being reeled on vessels then shipped and reeled out on the seafloor.

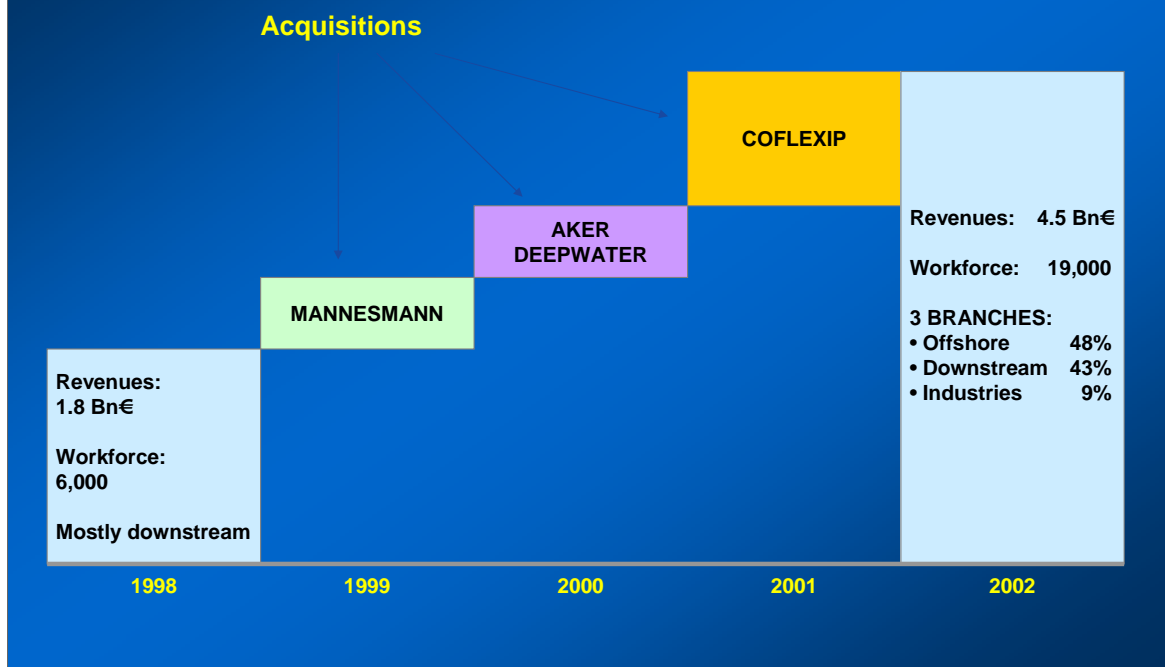
The Onshore branch with 45% of revenues is organized into 4 main product lines: Oil refining with grass-roots refineries and expansions as well as a large number of H₂ production units for which TP has proprietary technology.

Petrochemicals with major references such as the 9th Olefins complex and 10th Ethylene complex. The production capacity of the complexes executed by TP represents 14% of the world's production capacities for PE used for instance in the manufacturing of cables and 8% for PP. Technological alliances were made in particular with BP AMOCO resulting in PTA projects in China and Taiwan.

In the sector of gas 2 major projects are delivered to Adnoc in Abu Dhabi OGD1&2. Liquefied Natural Gas (LNG): TP has executed 5 LNG trains in Nigeria in a joint venture. Gas-to-Liquid conversion (GTL) is an emerging market for which TP is implementing the world's largest GTL complex in Qatar with Sasol Technology for Oryx GTL Ltd. Onshore pipelines for Natural Gas, Oil products & water mainly by TP Germany. A 500 km gas pipeline in Indonesia and a water pipeline in Fujairah.

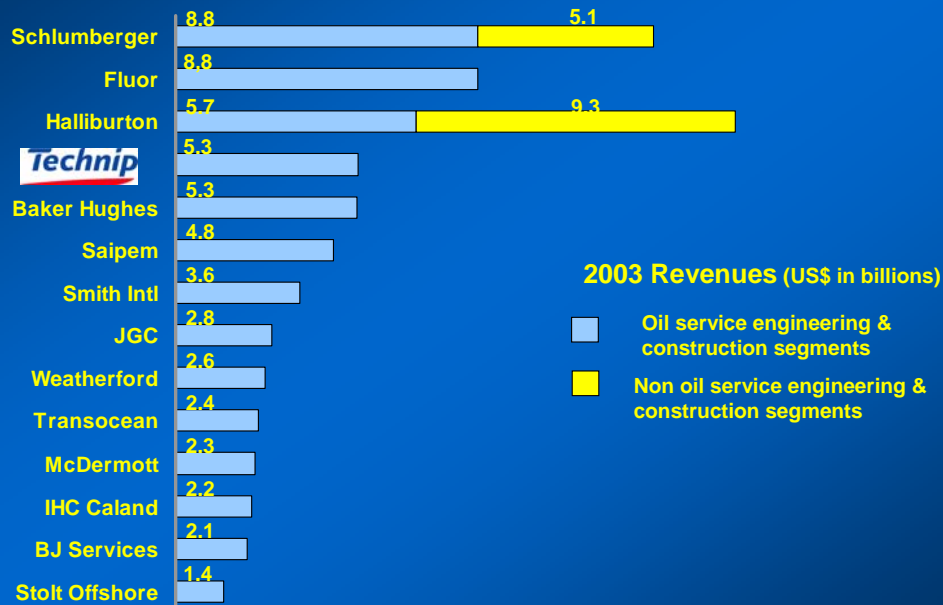
The Industry branch with 8% of the revenues covers many sectors of industry, mainly: Fertilizers, Pharmaceuticals, Chemicals, Food industries for which Technip has proprietary technologies in alcohol distilleries and palm oil refining, cement plants in Vietnam and Lebanon and power generation. TP Germany was awarded a contract for the expansion and modernization of 2 power plants in Bochum and Dortmund, and TP Italy a power generation at Termoli in Italy.

A FAST GROWING GROUP



During the last years TP has grown significantly by making major acquisitions, such as Mannesmann in 1999 and Aker Deepwater in 2000 and a merger with Coflexip in 2001, which has doubled the annual turnover and the number of employees. For 2003 the revenues amounted to €5.3 billion.

TECHNIP: No. 1 IN EUROPE, No. 4 WORLDWIDE

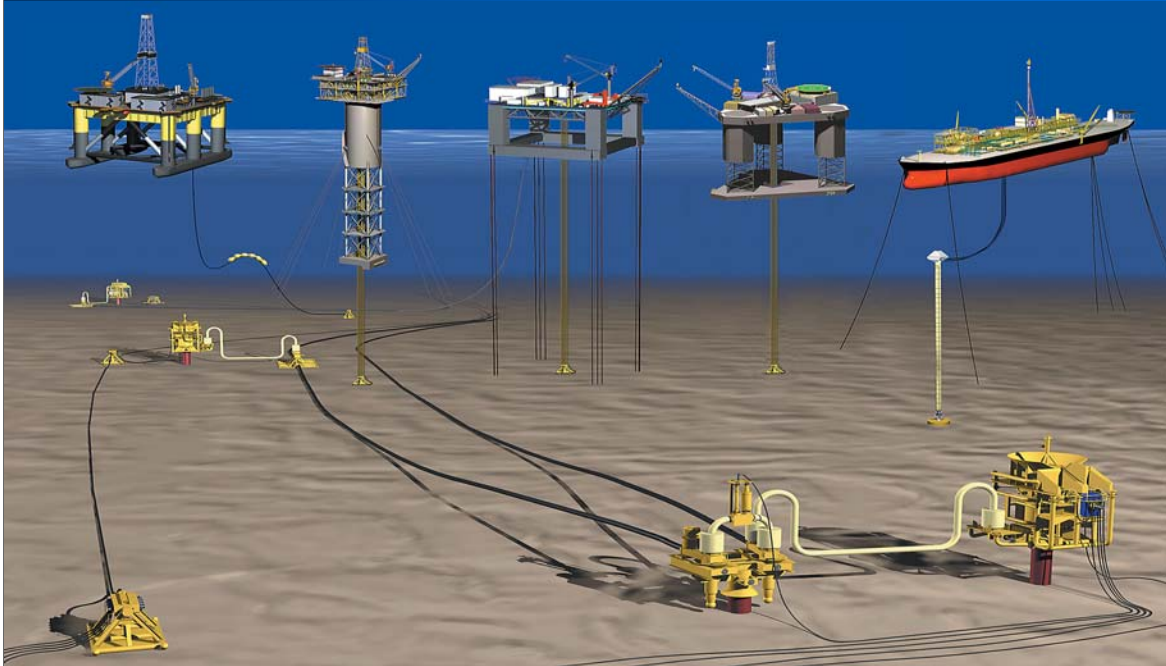


Source: Bloomberg

These acquisitions propelled Technip to the 1st position in Europe and to the 4th worldwide when considering oil service.

Technip went into partnerships or joint ventures with competitors on some large projects. For instance Snam, KBR & JGC for Liquid Natural Gas in Nigeria or Saipem & Stolt in offshore. Currently TP is bidding for QG2 in a joint venture with Chyoda.

OFFSHORE CREDENTIALS



Various types of the platforms are designed and built by Technip.

On the left we can see a semi-submersible platform currently being implemented by TP Brasil for the Petrobras P52 project.

Here is a deep water platform, the SPAR, implemented by TP Houston for the Constitution project.

On the right we can see a Floating Production Storage and Offloading system (FPSO). TP France was awarded last year a contract for the Dalia project in Angola with TOTAL. The contract includes the engineering and procurement of the top side. For the same project we received a contract for the Umbilicals and Flow Lines (UFL).

The TPG 500 is a fixed platform not shown here, implemented for several projects such as the East Area project for Exxon Mobil by TP Malaysia or the Shah Deniz project for BP by TP France in the Caspian sea.

ONSHORE CREDENTIALS



OGDII, GAS PROCESSING (ABU DHABI)

Steel: 150,000 tons

Concrete: 100,000 m³

Cables: 3,500 km

Contract Value: \$1.2 billion

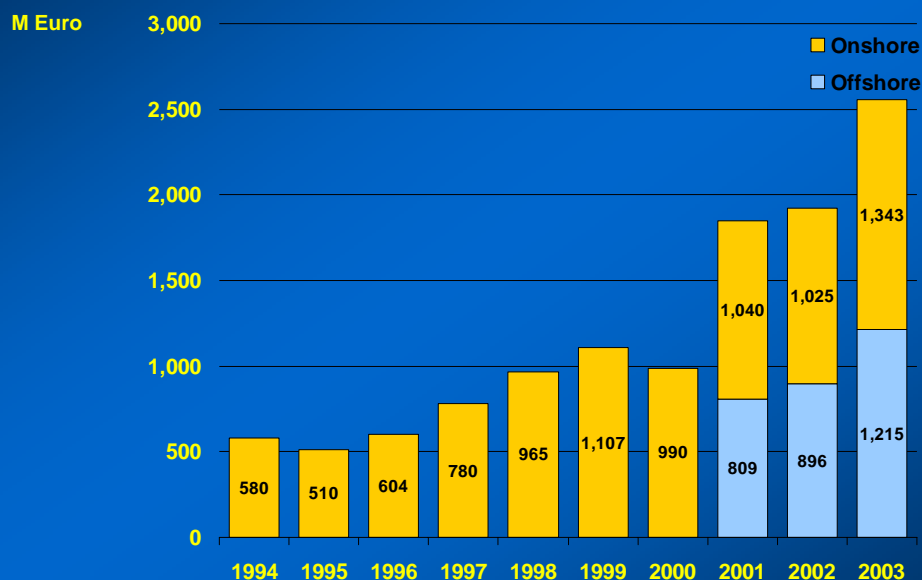
This is a view of the OGD2 project, a lump sum turnkey (LSTK) contract delivered by TP France in a joint venture with Bechtel to Adnoc in Abu Dhabi.

Some typical figures are listed here to give you an idea of the size of the project. The project was implemented in less than 3 years, which is the duration between the date of contract award and the ready for start up date.

TP is currently bidding alone for the OGD3 project.

A MAJOR PROCUREMENT PLAYER

EXTERNAL SPEND MAP - Year 2003 : €2,558 million

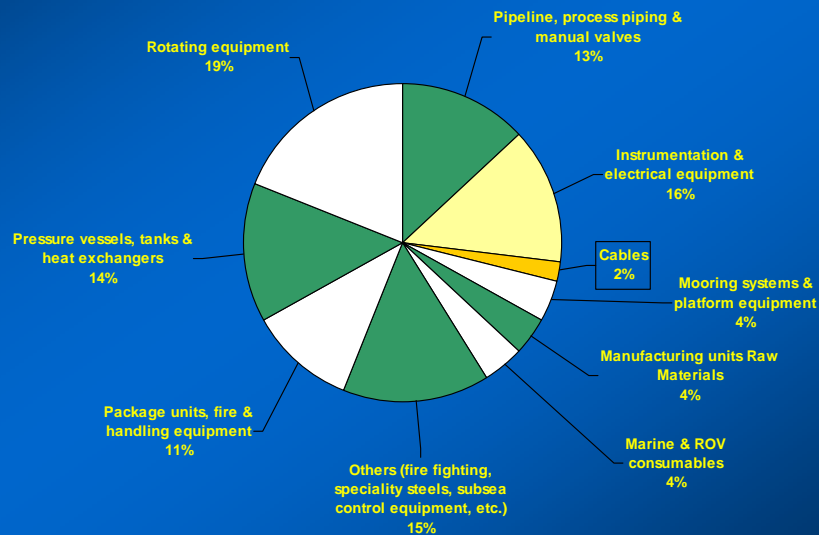


Now, a few words on our global procurements and the cables.

The external orders placed by the group for equipment amounted to €2.6 billion in 2003. This represents approximately one half of TP's revenues, the second half is mainly for engineering services and construction.

You can see a significant increase of purchases started in 2001 after the merger with Coflexip and the booming activity in both onshore and offshore.

SPLIT OUT PER COMMODITY FAMILY



A wide range of products and a great variety of equipment is purchased for the various projects offshore and onshore. Main products are complete package units, including for instance furnaces or water treatment units, pressure vessels, rotating equipment, piping, electrical equipment and instrumentation (E&I) and some other products specific to offshore, such as mooring systems used to anchor the platforms on the sea-ground.

Figures relate to the purchases made in 2003.

The cables, part of E&I, represent 2% of the total money spend for equipment, i.e. they represent 1% of the total cost of the project.

A CULTURE OF WORLDWIDE SOURCING EXAMPLE: SINCOR (850 million US\$)



This map identifies for a refinery built in Venezuela for TOTAL (Sincor project), from which country, what equipment and bulk materials were purchased.

Some procurement activities have been performed with the support of local offices, in particular in Venezuela and Korea.

A number of pieces of equipment were shipped to Singapore to be assembled in modules, then the modules were shipped and assembled at Jose, the work site in Venezuela.

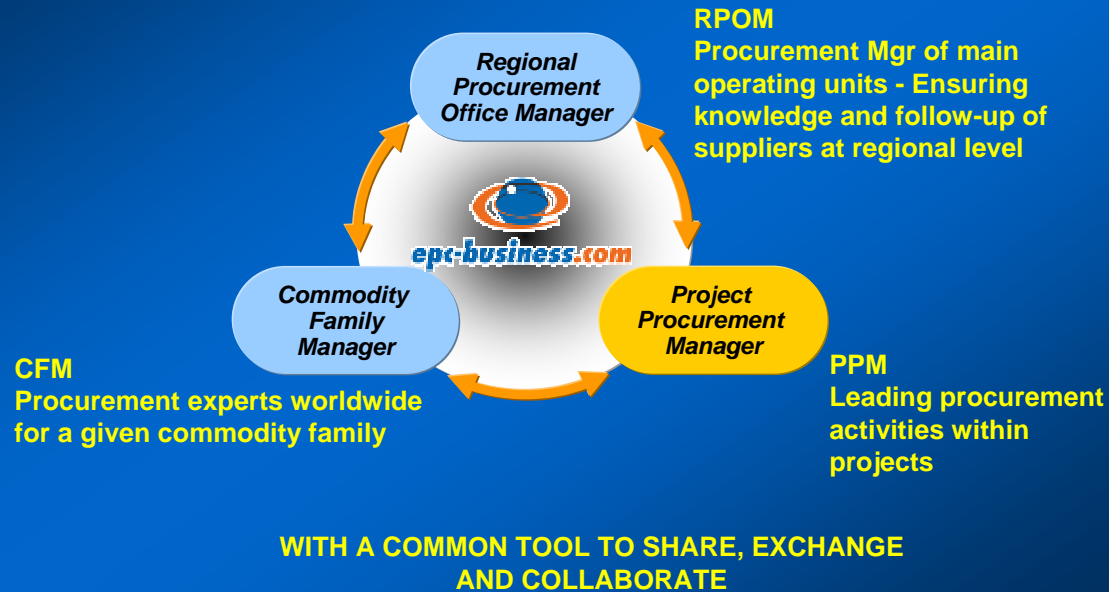
A WORLDWIDE PRESENCE INCLUDING PROCUREMENT OPERATIONS



The global procurement organization is supported by a number of procurement offices located worldwide. Regional offices are in Europe: Paris (Headquarter), Rome, Düsseldorf, Zootemer, and Aberdeen for offshore activities. 2 main offices are in the United States: Houston and Claremont. Rio de Janeiro in Brazil and Kuala Lumpur in Malaysia. The local offices report to a regional office, for instance Abu Dhabi, Spain and Portugal report to Paris; Shanghai, Perth and Singapore report to Kuala Lumpur.

GLOBAL PROCUREMENT: PRINCIPLES

A GLOBAL ORGANIZATION STANDING ON 3 KEY FUNCTIONS



The global procurement is organised around 3 main functions:

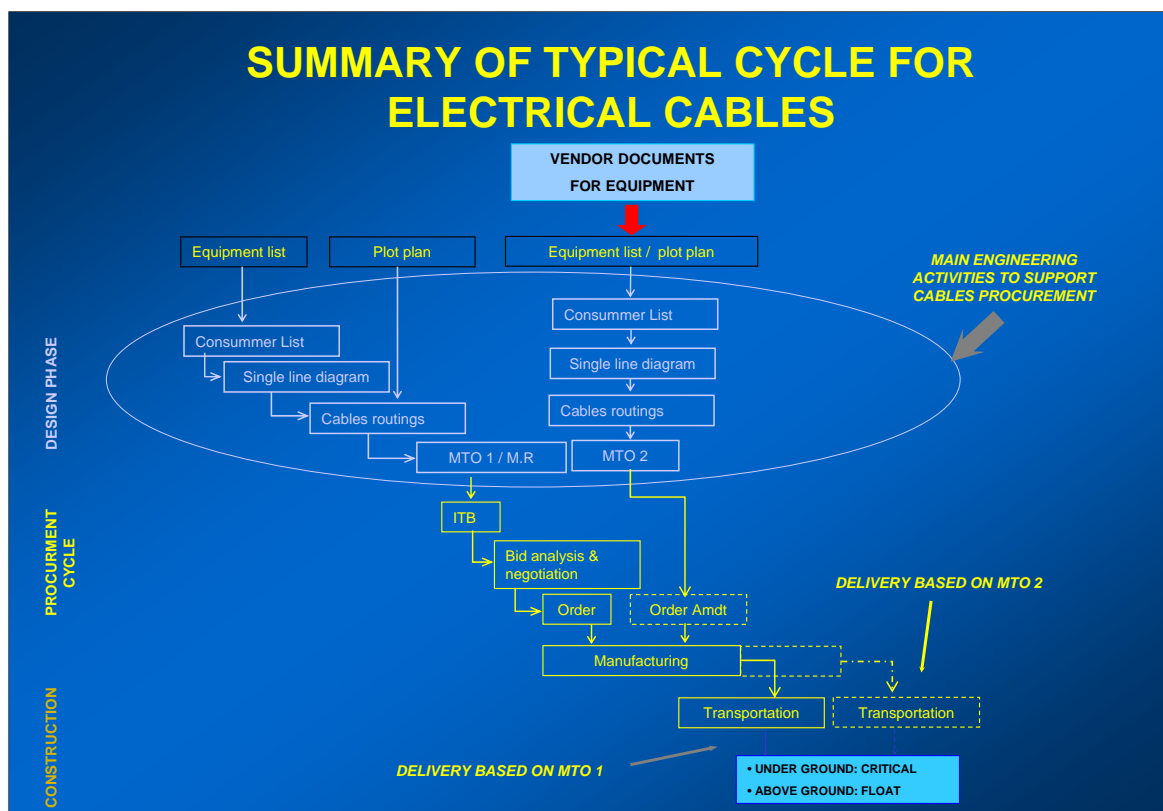
The Commodity Family Managers (CFM) know the products of their worldwide market. One of their main responsibilities is to negotiate purchasing agreements at group level with global suppliers.

The Regional Procurement Managers (RPOM) ensure the knowledge and follow up of suppliers at the regional level (region means a country or group of countries).

The Project Procurement Managers (PPM) take the lead in the procurement activities within their project. They are supported by the CFM's for instance for the issuance of the vendor lists or for the implementation of the purchasing agreements.

Everybody is using epc-business.com. It is a website developed by TP and used by all the affiliates. All the procurement activities, from the preparation of the inquiries up to the close out of the orders, can be performed in the website for all the products and some services.

Today more than 5.000 vendors are registered in this website. In addition to data directly entered by the vendors, identifying their company (turnover, number of employees, products). In addition the database contains in a restricted area, private data such as vendor's evaluation, Nonconformity Reports (NCR) by inspectors or specialists and possible warning messages issued by the global procurement organization and is available to all the purchasers in the group.



I will not go into the details of this slide. The flowchart shows how the engineering and procurement activities are organized in a project. The invitation to bids (ITB) can be floated only after receiving from the engineering department the MTO's, e.g. the quantity of cables to be purchased, that are established from the consumer list and from the cables routing mainly.

In general, in order not to delay the beginning of the construction activities on site, we have to purchase a first batch of cables, in particular those which are installed underground. Such cables can be on the critical path as they can delay the closing of the trenches thus delaying other civil works.

One way to reduce the overall project schedule is to overlap as much as possible the design, procurement and construction activities. But this also leads to unavoidable changes during the engineering phase which impact the execution of the orders.

TECHNICAL FEATURES OF CABLES PURCHASED BY TECHNIP

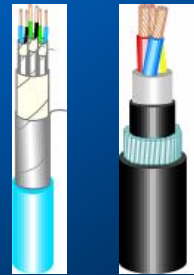
Industrial cables always meeting particular project's requirements

Example of types and quantities ordered for a current project

- LV power, control and lighting cables 0,6/1 kV 1200 km
- MV and HV cables up to 18/36 kV or more 200 km
- Sub-sea cables
- Instrument cables: pairs, triads ... 1000 km
- Optic fiber cables 200 km
- Earthing cables

Typical technical features

- Single/ multi-core copper conductors
- XLPE insulated, PVC sheathed
- Steel armour (for some cables)
- Lead sheathed (for some cables)
- Fire resistant (for some cables)
- Halogen free (for some cables)



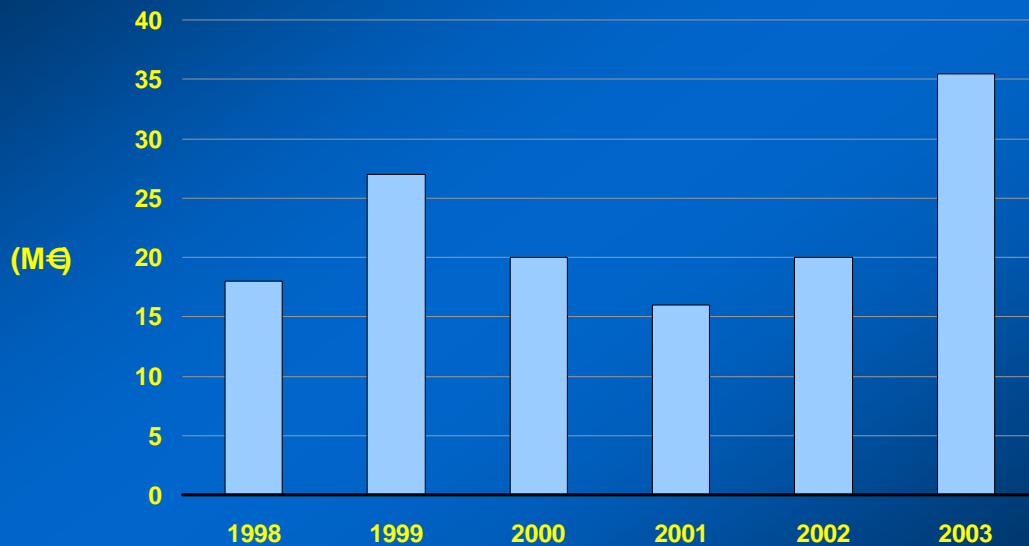
The great majority of the cables purchased by Technip are industrial cables manufactured on request. We almost never purchase from stocks.

The various types of cables identified here, such as LV, MV and HV cables, instrument cables, including optical fibers, are practically purchased in almost all of our contracts. Lengths are extracted from a current typical project.

Regarding the technical features, particular requirements such as steel armouring, lead sheathing, fire resistance, halogen-free depend on the applications and the client's requirement.

As an example: In a project all the cables are not fire retardant. Engineering department specifies such cables only if they are used to link safety devices.

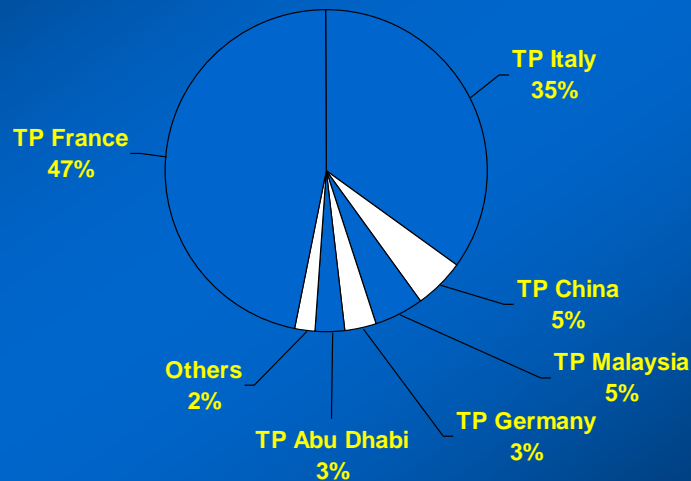
AMOUNT OF ORDERS PLACED TO CABLE MANUFACTURERS



Source: SpendMap - Orders placed by all affiliates

The annual amount of orders placed to the cable manufacturers by all the affiliates of the group ranges from €15 to €35 million. The average over the last 6 years amounts to €23 million per year .

THE ORDERS FOR ELECTRICAL CABLES ARE PLACED BY...



This chart shows Technip's affiliates that placed the orders for the cables. These figures are based on the orders placed over the last 6 years.

About 80% of the orders have been issued by TP France and TP Italy. This is in relation with the size of the contracts executed by these affiliates.

The ratios should change significantly in the coming years, as affiliates such as Abu Dhabi, Malaysia or China are steadily growing and dealing with bigger and bigger contracts.

CONCLUSION

- CABLES ARE THE « NERVOUS SYSTEM » OF A PLANT
 - No plant can start without power
 - No plant can be operated without control systems
- CABLES ARE CRITICAL ON THE SCHEDULE OF AN EPC PROJECT
 - Power is the first utility needed for plant start-up
 - Can generate heavy constraints at construction site (trenches ...)
 - Last item to be purchased since highly depending on design
- CABLES CAN RESPOND TO THE NEED OF « LOCAL CONTENT »
 - Contractual requirement more and more present in EPC contracts

As a conclusion I list the important points for the procurement of our cable needs. Thank you!