



Training, Education and Social Development:
Market Analysis and Opportunities

Venezuela

UPSTREAM OIL AND GAS INDUSTRY



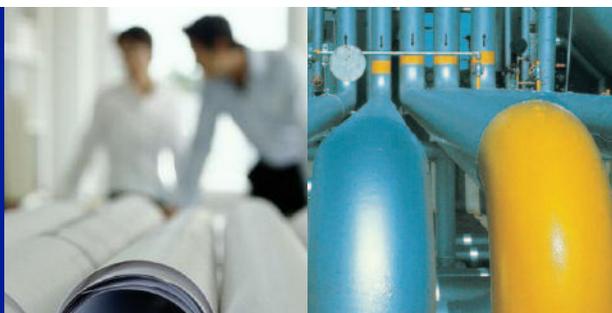
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Scottish Development International is the international economic development arm of the Government in Scotland and provides a broad range of support to companies and institutions to help them develop their overseas business.

Assistance varies from providing basic market information to detailed matching of business partners, as well as the organisation of inward and outward missions and Scottish stands at key international exhibitions. In providing these services Scottish Development International has staff based in markets throughout the world as well as working closely with the International network of British Embassies and Consulates. For more information visit the website www.scottish-enterprise.com.

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The GTEP initiative is a unique co-operation between the oil, gas and petrochemical industries and the UK government (UKTI), to help establish a greater presence of UK based skills in international markets.

GTEPs role is to co-ordinate the UK supply chain, identify and qualify opportunities that can be serviced and build the credibility of the UK supply chain in global markets.

GTEP is a membership based organisation and anyone involved in the training and education sector of the oil, gas and petrochemical industries is eligible to join.



“Venezuela will need to recruit and train up to 25,000 artisans and technicians for the oil and gas industry by 2012”

Alejandro Granado
Director HR PDVSA 26th April 2006

“PDVSA will require at least 5000 new engineers and technicians for the Faja alone”

Eulogio Del Pino
Director CVP November 2005

“PDVSA will educate 5000 new post graduates and professionals over the next 10 years – we have already secured agreements with... and we will seek more agreements in the near future”

Luis Vierma
VP Exploration & Production
OTC – May 4 2006

This will likely create the youngest national professional workforce in the international oil and natural gas industry

The issue for Venezuela and PDVSA especially, is to meet these targets with extremely limited national capacity – this is the opportunity.



Executive Summary

- The Venezuelan oil and gas industry is undergoing dramatic change
- The 2006-2012 Business Plan projects significant growth and record investment
- Three upstream priorities have been identified in exploration and production, heavy oil and offshore
- Additional priorities in the private sector and downstream are discussed
- The effect of the 2003 national strike (the 'Paro') is still felt inside PDVSA
- PDVSA E&P will need to resolve major skills shortages to achieve the industry's growth targets
- PDVSA is expected to hire over 5000 new recruits in 2006 alone
- PDVSA's HR Department has recently been re-organised
- Training in PDVSA will focus on upstream, technical uplift, social development, citizenship and the supply chain
- PDVSA has assumed responsibility to deliver part of the Government's social agenda with significant sums of surplus profit going towards social programmes and Government missions
- PDVSA staff must discharge their corporate responsibility to the communities. PDVSA, through its tendering process, is compelling its suppliers to do likewise
- The international operators have moved to new JVs with PDVSA
- There is investment to create new capacity in training and higher education in Venezuela
- The higher education sector has limited capacity to deliver the number of graduates which the business needs
- This report emphasises the need for technical skills in production and operations
- Opportunities exist for UK providers of technician, HSE and engineering training
- Possibilities exist for community development, environmental and sustainable development training
- Venezuela is a country for companies who are aware of and understand how to manage uncertainty
- You need patience and understanding of the Venezuelan culture to succeed
- UK Trade and Investment, the British Embassy in Caracas, the British Council in Caracas, Scottish Development International (SDI), The Global Training & Education Partnership (GTEP) and the British Venezuelan Chamber of Commerce are sources of support for companies wishing to do business in Venezuela.



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1.0



Introduction

This report is explicitly linked to the 2006 to 2012 Strategic Plan for Petroleros De Venezuela SA (PDVSA), the Venezuelan national oil company (NOC). It focuses on the big areas of investment, which are mainly in the upstream sector, and specifically on the education and training needs of PDVSA. E&T opportunities with the international-operating companies (IOCs) in Venezuela are also discussed.

In the upstream, it is acknowledged there is a major shortage of appropriately skilled and experienced engineers and technicians to help achieve the objectives of the Strategic Plan. There is also a need to improve overall health, safety, security and environmental performance.

The report will provide both qualitative and quantitative analysis. It will identify the main skills, the disciplines, the levels and estimates of numbers needed by the industry to cover the period of the 2006-2012 Plan. The report will describe time scales, development and skills enhancement methodologies and will make recommendations.

We recognise that many E&T providers supply products and services to all streams of the business. The report does not, however, focus on the downstream sector for the following reasons:

- The needs, as expressed by PDVSA, are mainly in the upstream
- The biggest budgets for training lie in the upstream

This report was commissioned to support a long-term programme of energy cooperation between the UK and Venezuela. Cooperation is especially active in the area of upstream especially offshore exploration and production. Venezuela and the United Kingdom signed a bilateral agreement to promote mutual exchanges on energy issues in 2001.

The report sets down market information accumulated by UK Trade and Industry in Glasgow, and by the British Embassy in Caracas through contact with PDVSA and businesses already established in Venezuela.

To assure the validity and authority of the report, we have sought information from reliable, knowledgeable and influential sources. Whereas every effort has been made to ensure that the information contained in this report is accurate and correct, the author cannot endorse the accuracy or reliability of any of the information or content contained therein.

Under no circumstances will the author accept any liability caused by reliance on information obtained through this report as the opinions presented represent only our best interpretation of the data made available to us.

2.0



Venezuela

A Snapshot

- Population: 26.6 million (UN, 2005)
- Capital: Caracas
- Area: 881,050 sq km (340,561 sq miles)
- Main exports: Petroleum, bauxite and aluminium, steel, chemicals, agricultural products, basic manufactures
- GNI per capita: US \$4,020 (World Bank, 2005)
- Major language: Spanish
- Major religion: Catholic
- Life expectancy: 70 years (men), 76 years (women) (UN)

Venezuela in Summary

Venezuela is the world's ninth largest oil producer and the largest in Latin America. It is currently the world's fifth largest exporter of oil. Venezuela is a strange mix of first and third world. With extremes of wealth and poverty, it has both a developed and underdeveloped infrastructure. Its economy grew 7% in 2005 and is projected to grow 7.5% in 2006.

Poverty

Statistics on poverty are notoriously difficult to present impartially and, for Venezuela, this is no different. Based on United Nations (UNDP) categories much of the population lives in poverty. Venezuela is making efforts to combat extreme poverty through the introduction of free education and health care.

Politics

The political situation in Venezuela is best characterised as dynamic and volatile. The current Government led by President Chávez dominates the political agenda. The Opposition in recent years has been weak and fragmented. Parliamentary elections in 2005 were boycotted by opposition parties leaving them unrepresented in the new National Assembly. President Chávez succeeded in his re-election bid in December 2006. Well publicised political tensions between Venezuela and the US dominate foreign policy. This has inevitably disrupted bilateral trade and investment links, but the two countries remain important trading partners. Venezuela will continue to reach out to countries it regards as 'non-aligned', often putting political advantage before economic gain.

21st Century Socialism

Since the election of President Hugo Chávez Frías in 1998, Venezuela has led the shift to left wing politics currently being felt across Latin America.

2.0



Venezuela

Under the banner of 21st Century Socialism, the 'Second Bolivarian Revolution' in Venezuela is using record receipts from oil production to tackle endemic poverty and social injustice. The current Government resists concepts of free trade, preferring to reinterpret trade within a national framework. The Government is a vigorous opponent of NAFTA.

Social Development

The Chávez Government perceives an inseparable relationship between the value derived through the exploitation of the country's natural wealth and a more equitable distribution of the accrued benefits. In Venezuela, this means significant investment in social programmes to reverse major inequalities.

There is sensitivity surrounding social development in Venezuela – it dominates the internal political agenda and attracts international interest. Care must be taken when engaging with local, national and public authorities that are charged with the responsibility for the delivery of social, environmental and economic development programmes on behalf of the Government. Companies should present a clear understanding of these complex and sensitive issues and find the appropriate language of co-operation.

Social Development and PDVSA

In 2005 PDVSA announced revenues of \$83bn, of which \$9.4bn was reported as profit, \$8.8bn was paid to the state in taxes and \$13.1bn was paid in royalties, of which \$4.8bn was set aside to fund state run social development programmes (Latin Petroleum Journal, February 2006). This highlights the growing role of PDVSA in supporting and funding the social development agenda.

Under the 2006-2012 Strategic Plan, the Government/PDVSA aims to increase Venezuelan oil production from a claimed 3.3mmb/d to 5.87mmb/d by 2012. To achieve this investment is expected to double from \$5bn/year to \$10bn/year. It is also expected that investment in social development programmes will keep pace with the growth in production. A continuation of high oil prices will be necessary to underwrite these investments.

Some of the funds generated through PDVSA are assigned to social projects through direct instruction from the Office of the President of the Republic. Other funds are allocated directly to the operating units where grassroots social development projects are being undertaken.

In 2006, PDVSA is expected to spend 10% of its annual investment on social development.

Social Districts

In early 2006, PDVSA launched a new structure for the direct delivery of social development initiatives in the producing areas. Distritos Sociales – Social Districts - will be funded through a 10% levy on oil and gas production within the district. This is required to ensure that social investment is targeted at the communities who are most affected by the operations of PDVSA. For other communities funding will be distributed centrally through the PDVSA affiliate, PALMAVEN.

2.0



Venezuela

Social Development Training in PDVSA

Given the requirement that PDVSA employees should be directly involved in delivering social investment, a unique opportunity has emerged. The challenge for PDVSA workers is how, and more usually, what projects to deliver. There currently exists a bewildering range of social interventions that vary in impact and community participation. Many of these fail due to a lack of knowledge of local issues and/or effective project implementation. This communication breakdown occurs on both sides – the giver and the receiver. Skills in consultation, design, implementation, participation and budgeting are essential to the success of social projects. Specialised teams are needed to facilitate the involvement of all parties and to educate those concerned in what makes for a meaningful and sustainable social programme. This type of training which extends beyond ‘traditional’ education reaches into both PDVSA and the communities. It offers opportunities for training organisations, university departments and charities.

Social Missions

Social Missions are projects designed to improve the socio-economic conditions of the country’s poorest inhabitants. Significant funding for the Missions comes from PDVSA directly. Three of the Missions are directly concerned with education, from basic to higher levels.

1. Ribas Mission - www.misionribas.gob.ve

Misión Ribas (launched in November 2003) provides remedial high school level classes to the five million Venezuelan children who fail to complete their formal education.

2. Vuelvan Caras Mission – www.veulvancaras.gob.ve

Vuelvan Caras ("Mission About-Face") seeks the transformation of the present Venezuelan economy to one that is oriented towards social, rather than fiscal and remunerative, goals. It seeks to stimulate increased involvement of ordinary citizens in programmes of sustainable social development, emphasising in particular the involvement of traditionally marginalised or excluded Venezuelan social and economic sectors, including those participating in Venezuela's significant "informal" economy.

3. Sucre Mission – www.misionsucre.gob.ve

Misión Sucre was launched in late 2003 to provide free and ongoing higher (college and graduate level) education to the two million adult Venezuelans who have not completed elementary-level education. Its goal is the mass education and graduation of university professionals in three years, as opposed to the traditionally mandated five or more years. The mission is thus an attempt to popularise, reform, and expand Venezuelan higher education beyond its traditional role of mainly educating the children of élite and middle class Venezuelans. The program is thus geared towards the poorest and most marginalised segments of society. (Source Reference Wikipedia)

3.0



Oil and Gas in Venezuela

Main producing and refining areas in Venezuela

Venezuela claims to have the largest extractable oil reserves in the world – bigger even than Saudi Arabia. The main producing regions are in: the West (around Lake Maracaibo); the East (around Maturin/Punta de Mata); and in the heavy oil belt of the Orinoco – the Faja).

In Venezuela the oil and gas industry has been repositioned by the current Government within Venezuelan society and now has a stronger role in contributing to the growth of national industries. It does this through the funding of large governmental investments in local production.

Most major foreign operating and service companies, including those from the UK, are established in Venezuela. In Maracaibo the oil capital of western Venezuela, there are already about 15 UK-based companies engaged in oil and gas work, the largest being Shell, BP and the service company, The Wood Group.



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Oil and Gas in Venezuela

The Government and the Law

The Ministry of Energy and Petroleum (MEP) - www.mep.gob.ve - is one of the most powerful ministries in Venezuela. Under previous governments, PDVSA was operated separately from the Ministry. Today, the relationship is much closer. The Minister of Energy and Petroleum is also the President of PDVSA. The practices of PDVSA are directed by the policies of the Ministry. A primary objective of the Ministry has been to 'regain sovereignty' over the national hydrocarbon reserve. This policy has led to the restructuring of contracts with foreign operators and the creation of new operating JVs (Empresas Mixtas) with PDVSA as the majority shareholder. The clear message the Government is promoting is that the resource is under the full ownership and control of the State.

The oil and gas industry in Venezuela is governed by the Hydrocarbon (1999) and Gas (2001) Organic Laws. These laws set out how the industry works, how the national oil company must conduct itself and how foreign companies can participate. There is no direct reference to training and education within these laws – they refer primarily to extraction, participation, shareholding, ownership and environment.

Diversification and Internationalisation

Since 2003, Venezuela has embarked on a strategy to diversify its market for oil and associated products from a 'dependency' on the US, Venezuela's main customer and supplier.

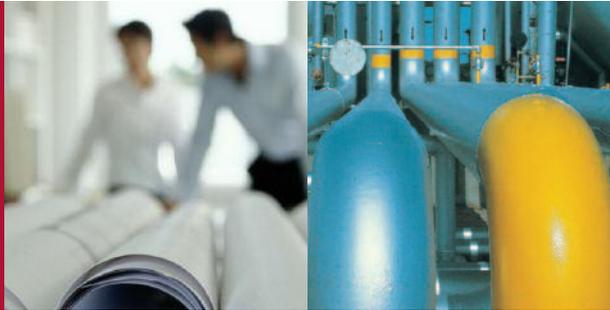
This policy has only led to a small reduction of supply to the US. Venezuela has signed new supply agreements with countries like China and India.

Venezuela is also seeking to supply the Caribbean market through the PetroCaribe initiative. Apart from Trinidad and Tobago and Barbados, the Caribbean nations have all signed up to this accord. Through these contracts, Venezuela supplies oil and derivatives on favourable financial terms with long payment schedules.

Venezuela is keen to create closer ties to other Latin American countries. One route is through joint hydrocarbon/energy projects. The largest of these projects is the 8000 km "Gasducto del Sur" gas pipeline from Venezuela to Argentina via Brazil. In July 2006 Venezuela joined Mercosur, the South American economic and political union. Venezuela has since announced its departure from the Comunidad Andina de Naciones (Andean Community of Nations) and the G-3 (Mexico, Colombia and Venezuela).

In addition to new supply contracts and projects, Venezuela has signed cooperation agreements paving the way for further participation in the Venezuelan market. New entrants include national oil companies: Petrobras (Brazil); CNPC (China); OGNC (India); INOC (Iran); and others, Lukoil Overseas Ltd and Gazprom of Russia. Spain's Repsol YPF is also active. As an indication of its efforts to diversify, PDVSA has opened new offices in Cuba, China, Iran, Brazil, Argentina, Bolivia and India. PDVSA has recently closed its offices in London and has plans to relocate these operations to Spain.

3.0



Oil and Gas in Venezuela

The Wider Oil and Gas Industry in Venezuela

Outside PDVSA, the industry is supported by an eclectic mix of public, semi-public and private sector organisations and companies. The Government is committed to increasing the level of local participation in major projects and openly favours Venezuelan entities in general bidding rounds. The private sector has come under pressure to achieve a better fit with the wishes of the Government in the way it discharges its responsibilities, especially within the social development agenda. New rules govern how companies can tender for business. A number of new initiatives designed to increase national content in Venezuela are being implemented. PDVSA is at the heart of this drive. Their focus is primarily on the local supply of goods and services.

National Content and Empresas de Producción Social (EPS)

One of the main objectives of Venezuelan Government is to increase direct participation by local companies in the supply chain. It has made efforts to promote the creation and establishment of co-operatives. This initiative has evolved toward the creation of new type of company, "Empresas Production Social" or the EPSs. These are businesses that ideally operate with a 'social conscience'. The intention is to diversify the supply chain to help deliver opportunities for previously unqualified enterprises.

The EPS initiative is a cornerstone of Government policy that blends business and the social development agenda into one package. The implications of EPS extend deeply into the way companies conduct business in Venezuela. In some circumstances, companies have to register as an EPS to pre-qualify for PDVSA tenders – there is a link on the PDVSA webpage for companies wishing to obtain information and to register.

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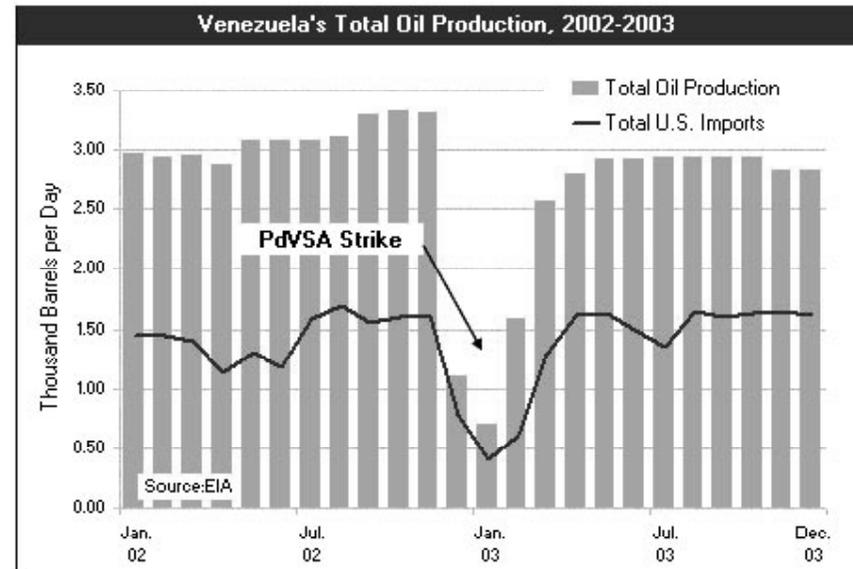
Petroleos de Venezuela SA (PDVSA) – www.pdvsa.com

Summary

In this report I have focused on the National Oil Company (NOC) of Venezuela, Petroleos De Venezuela SA – PDVSA. Further information on the recent history of PDVSA will help put the skills shortage and massive training needs of that organisation into context.

In 2002, **PDVSA** had a core workforce of over 40,000. The technical base in the company was very highly regarded both nationally and internationally. Following a general strike that paralysed the industry (the ‘Paro’) in early 2003, a large percentage of PDVSA employees elected not to return to work and, subsequently, some 19,500 have been dismissed. This represents a significant loss of skills and experience – at all levels and in all disciplines. There remains a legacy of political antagonism between those workers who left after the ‘Paro’ and those who remained. This polarisation has exacerbated the skills capacity shortfall.

Efforts to recruit and replace those who have left PDVSA have focused mainly on: encouraging retirees back to work; the recruitment of skilled and semi-skilled workers from other industries; and the recruitment of young, qualified although largely inexperienced craft, “técnico superior” and university graduates. There is little evidence of widespread recruitment of foreign workers. While gaps in the workforce have been reduced, new recruitment remains a priority. There are plans for 5000 new recruits to join PDVSA in 2006.



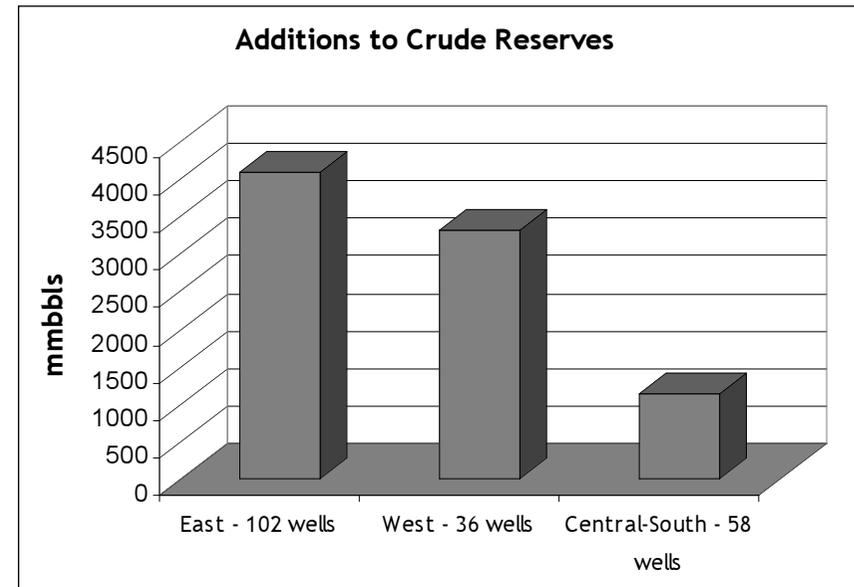
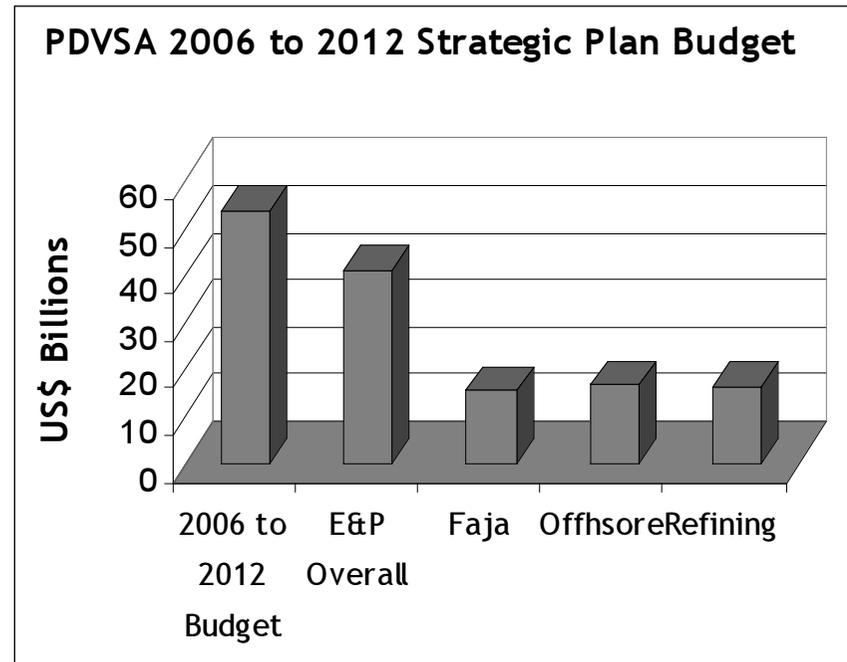
It is openly acknowledged that a large and significant proportion of PDVSA employees are working outside their existing competence profiles and sections of the ‘frontline’ workforce have only between 0 and 2 year’s experience. PDVSA now has a relatively young workforce, that is eager to advance and participate, but which requires new knowledge, skills, experience and confidence to be effective.

4.0



Petroleos de Venezuela SA (PDVSA) – www.pdvsa.com

The New PDVSA Strategic Plan 2006-2012 - "The Plan"



The new PDVSA Strategic Plan 2006 to 2012 is known as the **Oil Sowing Plan**. The first phase involves an investment of around US\$56 billion to be financed by PDVSA (70%) with the remainder from the private sector. The primary objective of the Plan is to increase production from the currently announced

level of 3.3mmbbls/d to 5.87mmbbls/d by 2012. In the Plan 4mmbbls/d of future production will be directly produced by PDVSA. The focus for PDVSA is therefore on the challenge this represents and the necessary investment in exploration, production, infrastructure and skills the Plan will require.

4.0



Petroleos de Venezuela SA (PDVSA) – www.pdvsa.com

In the Plan, PDVSA E&P will spend some \$41billion, of which \$21.7billion will be directed to investment with the balance going to costs. The corporate strategy covers increases in both reserves and in production. The three main areas where production growth is to be focussed are:

- Increases in production of light and medium crudes, including the development of the Cretaceous in Lake Maracaibo with reserves rising by 8.6 billion barrels
- Increases in gas (with around 50% from offshore) with production rising from 6.3 to 11.5 bcf/day and proven reserves to around 195tcf
- Increases in Orinoco heavy oil with production rising from 0.6mmbbs/d to 1.2mmbbs/d with a project to certify recoverable reserves of 235 billion barrels

PDVSA Exploration and Production (E&P) Divisions

Similar to any other operating company, E&P is by far the largest budget holder (typically 70% of the total annual expenditure) and has the biggest workforce. PDVSA E&P is organised into three main producing divisions:

- Oriente (Eastern) – 7000 workforce
- Occidente (Western) – 14000 workforce
- Sur (Central-Southern) – 1200 workforce

Within each of the Divisions, a number of districts have been created and within each district, reservoir production units (RPU) have been established.

PDVSA E&P has the most urgent and critical training need within PDVSA. As a result of the 'Paro', E&P experienced a significant loss of skills, knowledge and experience in critical areas of operations and production especially in

subsurface skills such as geology and reservoir management. Much of the focus of the HR function within PDVSA since 2005 has been channelled into finding ways to close this gap.

Corporación Venezolana de Petróleo (CVP)

Venezuelan Petroleum Corporation

Corporación Venezolana de Petróleo (CVP) is a separate organisation within the structure of PDVSA. In August 2003, a decision was made to transfer all 33 operating contracts, the four Faja strategic associations, and risk exploration contracts to CVP. The move was intended to allow PDVSA to concentrate on production from its own fields. In 2005, CVP was made responsible for negotiating the migration of 33 operating contracts involving foreign oil companies to new Empresas Mixtas (Mixed Companies) with PDVSA as a majority stakeholder.

CVP The Faja – Orinoco Heavy Oil Belt

Venezuela possesses vast quantities of non-conventional hydrocarbons, including heavy oil, extra heavy and tar sands. Exploitation of these reserves requires new skills sets, knowledge and technologies. All of the projects in the Faja are managed by CVP. Currently, the so-called 'Faja Four' projects produce 600,000bbls/day. These are:

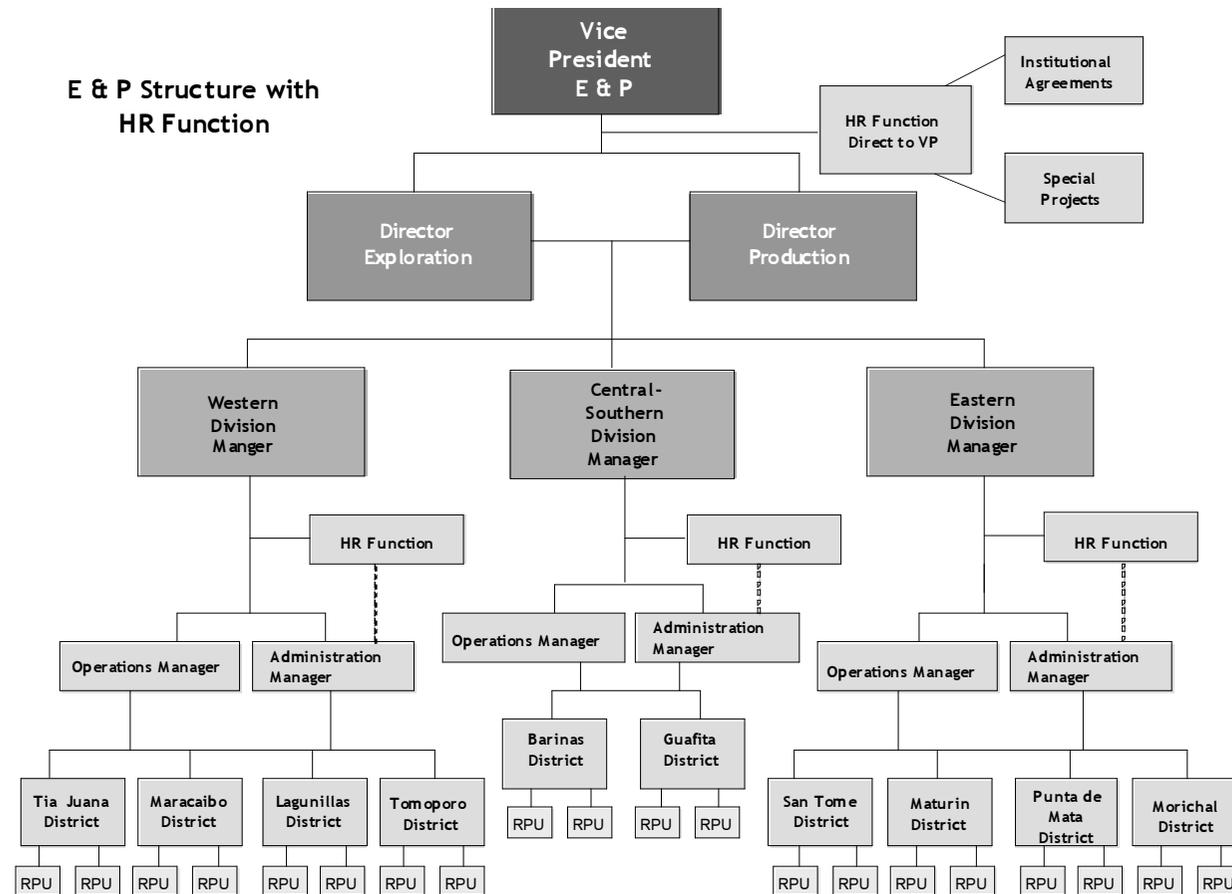
- SINCOR (also known as Boyacá) – Total (47%); PDVSA (38%); Statoil (15%)
- HAMACA (also known as Ayacucho) – ConocoPhillips (40%); PDVSA (30%); Chevron Corporation (30%)
- CERRO NEGRO (also known as Carabobo) – PDVSA (41.67%); ExxonMobil (41.67%); BP (16.66%)
- PETROZUATA (also known as Junín) – PDVSA (49.9%); ConocoPhillips (50.1%)

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E & P Structure with HR Function



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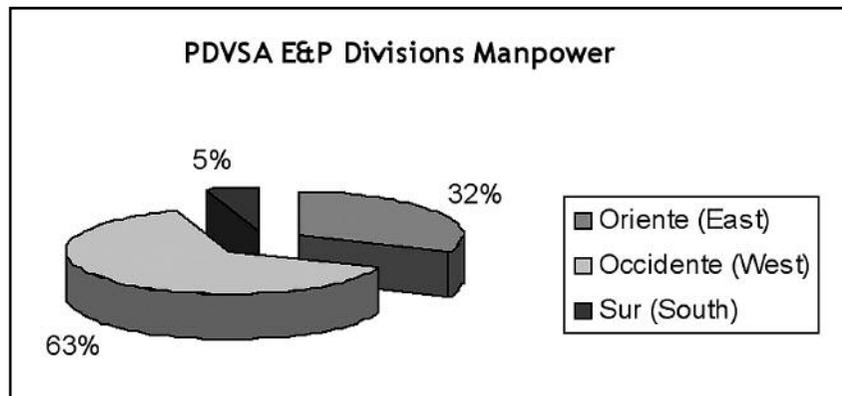
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The target for 2012 is to double production to 1.2mmbbls/day. This will require huge investment in processing and transportation infrastructure. Indeed, an entire workforce has to be created to deliver the new production targets.

Faja Certification

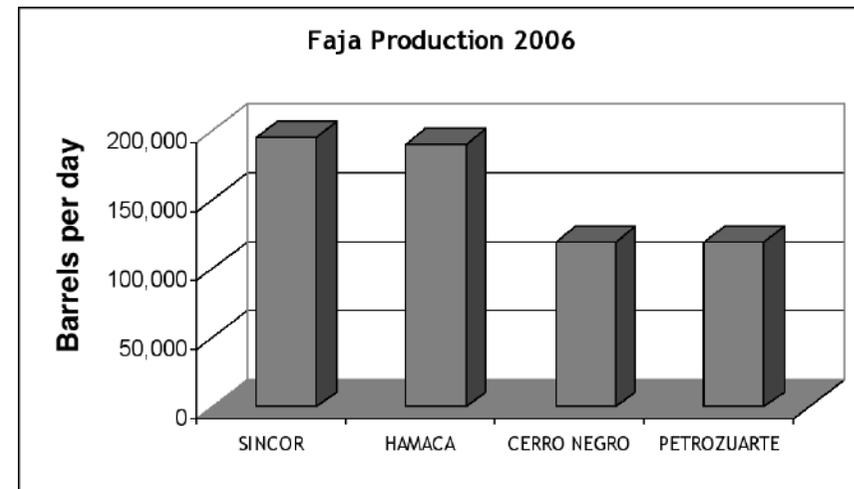
A major project has been implemented to quantify and certify reserves in the Faja. To execute this project, Venezuela has designated the following companies:

- ONGC – India
- Lukoil Overseas – Russia
- Gazprom – Russia



- Repsol – Spain
- Petrobras – Brazil
- Petropars – Iran
- CNPC - China

These companies (a mix of IOCs and NOCs operating internationally – INOCs) have been assigned blocks within the 4 main Faja areas, now referred to as Boyacá, Ayacucho, Carabobo and Junín. As this project grows to encompass the certification of the whole Faja area, additional companies will likely become involved, perhaps including the international majors. The aim is to prove recoverable reserves in The Faja up from around 80 billion barrels to 235 billion barrels.



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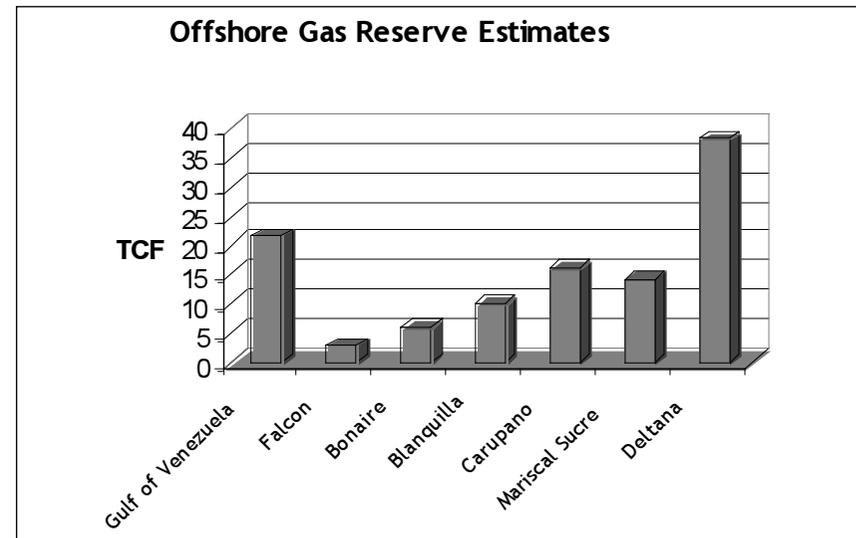
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CVP PDVSA Offshore – Delta Caribe

In 2004, PDVSA launched its offshore organisation, CVP PDVSA Offshore. Venezuela's offshore sector is still largely undeveloped. The organisation's strategy is to develop the country's huge natural gas potential, estimated at 151TCF, to help offset domestic gas shortages and to leverage the petrochemical industry. These are important elements of the National Development Plan for Venezuela. New gas production is needed to push forward industrialisation. Most new offshore exploration is for natural gas in deep water. The exception is ConocoPhillips' Coro Coro project in the Gulf of Paria, which is in relatively shallow water (30m) and produces oil. Coro Coro production is expected to start in early 2007. Phase two, which is now under construction is expected to come on-stream by 2010.

The main offshore gas projects are Plataforma Deltana (31TCF); Mariscal Sucre (14.3TCF) and Rafael Urdaneta (35TCF). All these projects involve PDVSA in partnership with one or more IOCs. One offshore gas project had entered the development-planning phase: Chevron's Deltana Block 2 discovery. First gas is expected before 2011. Statoil has recommenced drilling in Block 4 in 2006.

New exploration blocks have been issued for Falcon and the Gulf of Venezuela in the north west of the country, with more to follow. Within the 2006-2012 period, the offshore sector is targeted to produce around 3bcfg/day. The number of platforms required for this level of activity is estimated at between 6 and 14 in medium to deep water.



Empresas Mixtas

Until late 2005, 32 concessions awarded through the license rounds of 1992, 1996 and 1997, were operated directly by 19 different foreign oil companies. Most of these concessions were mature fields. The objective of the 'apertura' was to allow international operators to return to the market to increase production and extend the life of fields using their own expertise and technology.

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In 2004, as part of the 'recovering sovereignty' directive, the contracts for these concessions were declared 'illegal' by the Ministry of Energy and Petroleum. The companies were given a deadline of December 2005 to agree to migrate to new JV contracts, with PDVSA acquiring the majority shareholding – a minimum of 60%. All 32 projects have now migrated, but four companies (Exxon Mobil, Total, ENI and Statoil) have still to agree terms.

One of the features of the new contracts is that those who were employees of the international companies are now employees of the new JVs, with PDVSA as the main shareholder. The employment status of these employees is unclear and the IOCs are watching to see how the new contracts will take shape. Because of political sensitivities there are restrictions on using former PDVSA employees. Investment in staff training currently appears to be limited to statutory or mandatory training. A full list of the foreign companies operating in Venezuela is in Appendix 1a. A list of the companies working in the new JV's is in Appendix 1d.

PDVSA Affiliate Companies

PDVSA has a number of affiliate companies involved in different aspects of the business including marketing, research and development, procurement, social investment and enterprise creation. Some of these affiliates have training requirements of their own, but this requirement tends to reflect the specialist area or function they perform within the company.

PDVSA Gas

PDVSA Gas was established as a fully owned affiliate of PDVSA in 1999 and has two primary functions:

- Development
- Marketing

PDVSA Gas has two production divisions, Anaco, in Eastern District and Block E in southern Lake Maracaibo. They now operate the producing fields in these areas, with technical support provided by PDVSA E&P. PDVSA Gas also explores in these areas using PDVSA E&P management and technical services. PDVSA Gas will also participate in the offshore gas production area.

Downstream - Refining

PDVSA has been refining crude for over 40 years, both owning and managing the infrastructure. PDVSA holds a strong downstream position both in Venezuela and in overseas markets, with oil refining, transport and marketing operations in the US, the Caribbean, other Latin American countries, and Europe. PDVSA has plans to expand refining capacity: inside Venezuela (with proposals to construct three new refineries and upgrade complexes); and in Central, and South America, China and the Asia Pacific Region.

Downstream - Petrochemical

The petrochemical sector in Venezuela is managed by the PDVSA affiliate Pequiven. Pequiven operates and fully owns 16 plants, producing basic petrochemicals and fertilisers. Pequiven also participates in over 20 JVs and has major plans to expand its presence in Europe, Asia, The Caribbean, South, Central and North America. Pequiven has four major complexes in Venezuela: El Tablazo, José, Complejo Refinador de Paraguaná and Morón.

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BARIVEN

Bariven is the PDVSA affiliate responsible for procurement and has taken on a more strategic role in projects engineering. There are 4 units within Bariven:

INTEVEP

INTEVEP is the PDVSA affiliate responsible for all 'in-house' research and development. Prior to the 'Paro', INTEVEP held a position as a world-class R&D organisation, and had the highest concentration of PhDs and leading edge oil and gas researchers in Latin America. Today, INTEVEP is a smaller organisation.

PALMAVEN

PALMAVEN is the PDVSA affiliate responsible for the delivery of social development in line with the national plan for Venezuela. PALMAVEN seeks to:

- incorporate training in the area of social development and sustainable development
- establish social development as a core responsibility of PDVSA and its employees
- develop ways and methods to roll out social development training within PDVSA
- draw lessons learned from other producing countries and provinces
- manage expectations and align foreign models for development with the Venezuelan culture
- encourage diversification and to improve opportunities within established industries

In 2005, much of the budget spent by PALMAVEN was centrally managed. From 2006 onwards, the budgets are being divested into business units – the Social Districts. PALMAVEN retains a central responsibility to ensure social investment reaches beyond the oil districts to other parts of the country.

Gerencia Corporativa de Empresas de Producción Social Corporate Management for Social Production Companies

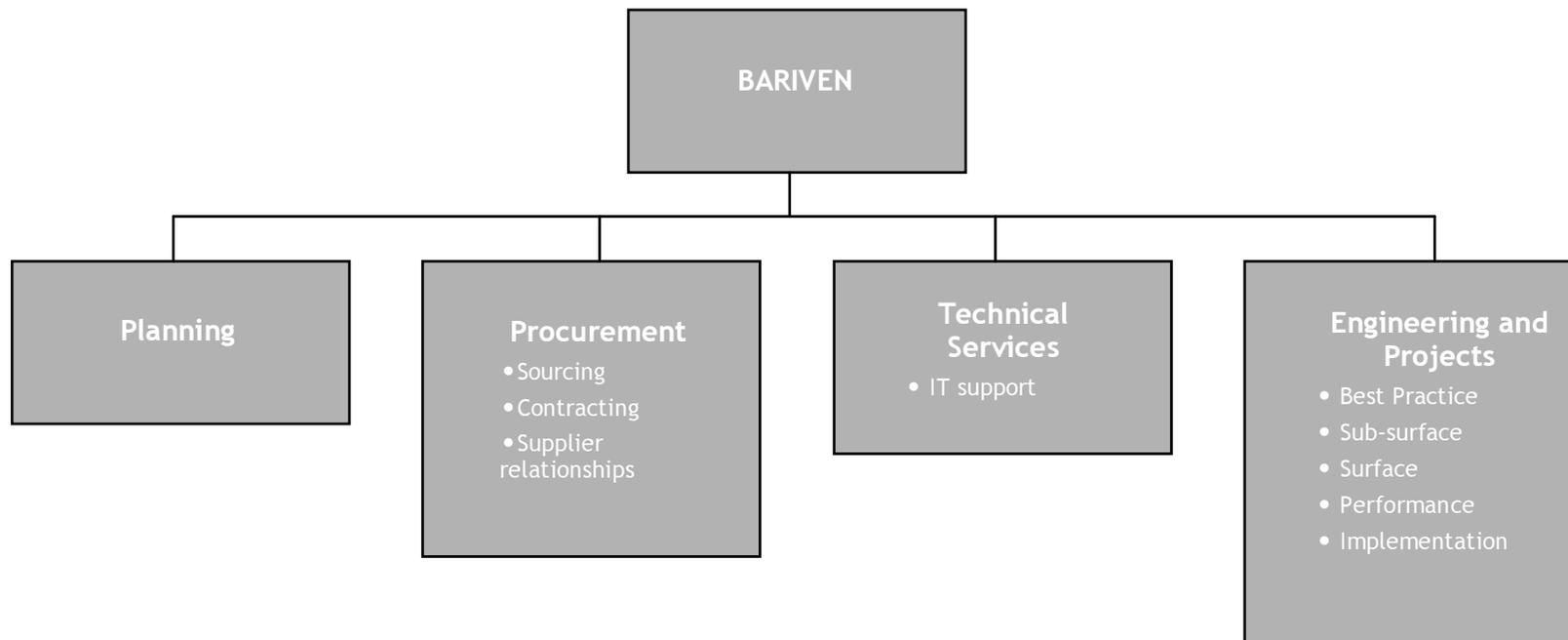
This department of PDVSA was previously known as Domestic Capital Development (DCD). DCD had the role of promoting national content into the oil and gas industry in Venezuela. A major focus was the planning and delivery of initiatives to expand the domestic workforce, and domestic goods and supplies content in upstream projects. DCD did not directly hold budgets for training, but sought to identify areas of need and potential across the business. DCD also had close working relationships with the private sector, especially the Cámara Petrolera (Petroleum Chamber).

DCD has changed its name to Gerencia Corporativa de Empresas de Producción Social (translated as Corporate Management of Social Production Companies). The Department has prime responsibility for aligning national content objectives with the creation of Empresas de Producción Social (EPSs), or Social Production Companies.

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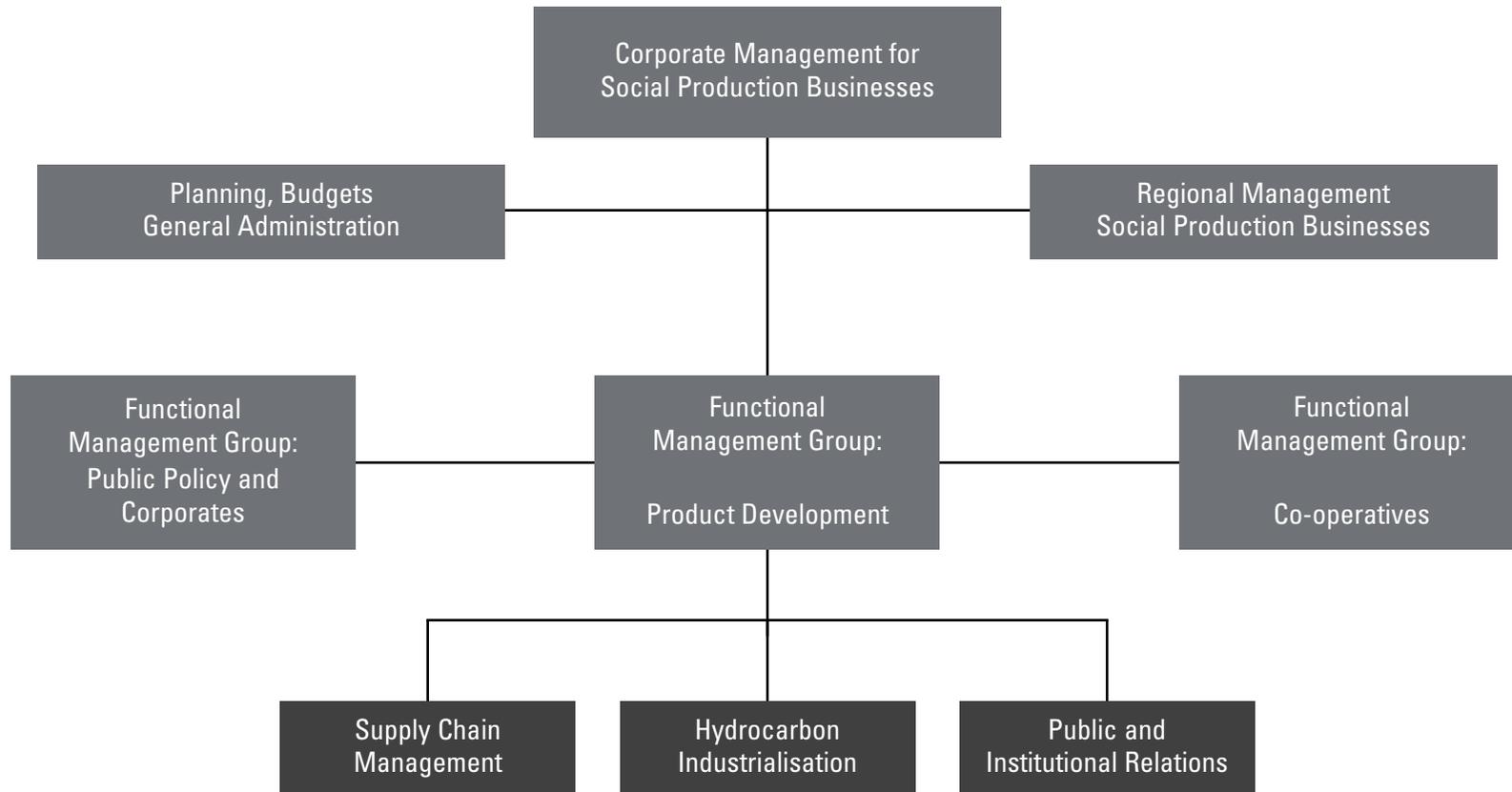
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Communities

In Venezuela, communities are regarded as an integral stakeholder in the oil and gas industry, and their inclusion here is deliberate. It is to the underprivileged and poor that much of the social investment from PDVSA is directed. Members of communities are encouraged to participate in projects (such as the social missions) that are designed to deliver tangible opportunities for training, education, basic foodstuffs, health care and other ways to improve quality of life. Communities are not simply those who live next to oil installations, but everyone who needs support to lift themselves out of poverty. However, all PDVSA business units are expected to implement programmes of social development for those communities who are directly impacted by the activities of the company, in addition to the missions.

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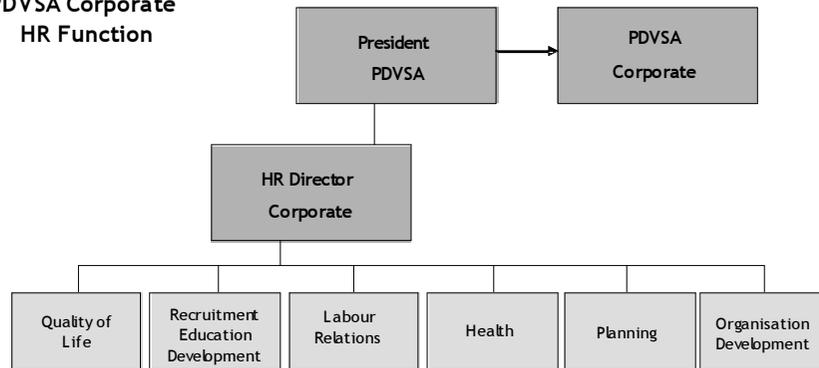


Human Resources

Human Resources Management in PDVSA

Since the 'Paro', PDVSA has been working to create a new HR organisation. This new structure was implemented in April 2006.

PDVSA Corporate HR Function



Under the new structure, the Director of HR now reports to the President of PDVSA. Previously, the Director of HR would report to a PDVSA Board member, the Vice President for Refining. Under the new structure, six departments with distinct functions have been created to implement HR policy:

- Quality of Life
- Recruitment, Education and Development
- Labour Relations
- Health (of Employees)
- Planning
- Organisation Development

Each of these departments are responsible for developing policy and issuing guidelines for the implementation of training. They are also responsible for the collection of data and reporting back to the HR Director on the effectiveness of policy and on recommendations for improvements where needed.

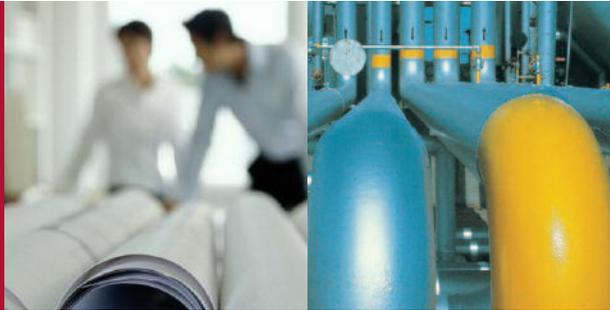
HR Development in the New PDVSA

Within the new HR function, development has focused on training in two very specific categories:

1. Enhancement of the skills and knowledge of the current workforce, including alignment with and reinforcement of the Government's aims and priorities
2. Development of new recruits, covering PDVSA culture, professionalism and discipline

Efforts are being made to incorporate a new ethos in existing and new employees focusing in large part on the corporate and social responsibility agenda currently being engendered within PDVSA. The ethos is closely aligned to the national development plan with an emphasis on the workforce being connected to the social responsibilities PDVSA now shares with the Government.

5.0



Human Resources

Corporate HR Strategy

The Department for Recruitment, Education and Development is responsible for PDVSA's strategic training and educational policy. PDVSA is supporting the development of higher education capacity in Venezuela through Mission Sucre, including the supply of funding and other resources to set up the Bolivarian University of Venezuela (UBV).

PDVSA is also securing strategic alliances with a number of overseas universities which provide oil and gas education at Masters level. Recent agreements have been made with: the Robert Gordon University in Aberdeen to provide specialist oil and gas Masters degree courses; Instituto Superior de la Energia in Madrid (effectively Repsol Corporate University) providing Masters Degree in Exploration and Production and in Refining and Petrochemicals; and University of Houston in Geological Sciences. Other institution to institution agreements are planned. This represents a significant effort by PDVSA to shore up the high level skills and knowledge gap which was a consequence of the 'Paro'.

In the area of technical training for E&P, PDVSA has struck deals with 7 major institutes and organisations to create a single 2-year plan of technical training. The seven organisations involved are:

- French Petroleum Institute (IFP)
- NEXT (Schlumberger, Herriott-Watt, Texas A&M and Tulsa)
- Canadian Petroleum Institute
- IESA (Institute for Superior Administration Studies, Venezuela)
- International Well Control Federation (IWCF)

- Total Quality Management (TQM – Spain)
- International Maritime Organisation (IMO)

This is a comprehensive and far reaching project that will begin in late 2006 and represents a concerted effort by PDVSA to match their needs with world class resources. A highly detailed plan with timetables, programmes, courses, curricula, locations and tutors has been created, but specific technical training needs to be sourced from other organisations outside this configuration.

The training that is provided by this group is not fully comprehensive. The focus is almost entirely on technical, sub-surface and engineering. Not covered is training for: Technician Level (namely mechanical, electrical, instrument and process); and all aspects/levels of health, safety, security and environment (HSSE), industrial hygiene logistics, supply chain, corporate and social responsibility, project management, asset management, sustainable development, and environmental management.

Implementation of HR at Divisional Level

Under the new E&P structure, the HR function is under the direct control of a Divisional Manger, but most of the decision-making regarding who does what and when is taken at the District Level, with the Division in a sanctioning role regarding budgets. The Division decides general training policy or when initiatives are to be rolled-out to reservoir production units. At the grass-roots level district based HR Superintendents manage decision making and actual implementation of training. HR has no direct representation below District Level.

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Human Resources

Districts are responsible for training strategies, identifying gaps and deciding where the need is greatest. It is the District that carries out the logistics and manages conflict between operational need and the release of staff for training.

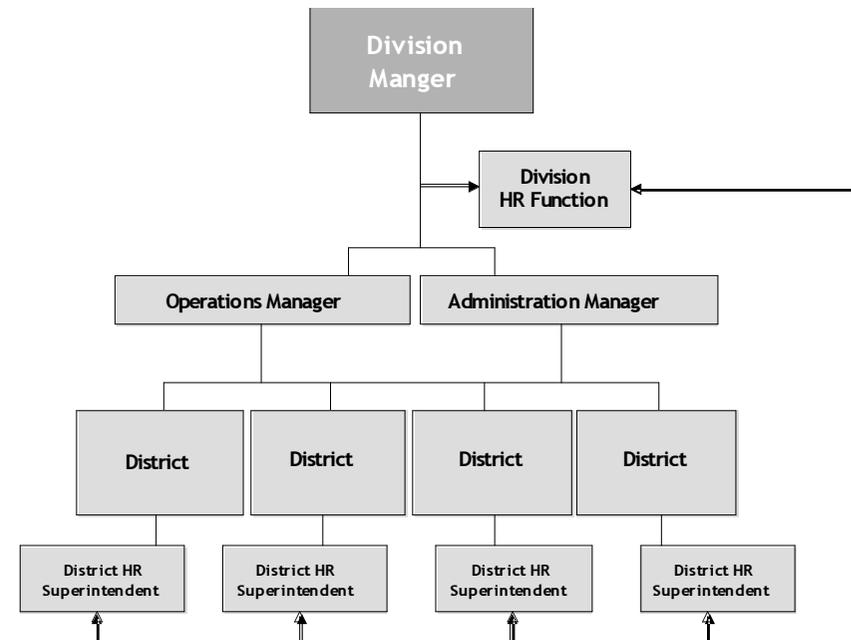
PDVSA has announced it will reach out to national and international universities and institutions to help create a critical mass of appropriately skilled professionals required to deliver the 2006-2012 Strategic Plan. It is estimated that some 5000 new employees are expected to join PDVSA in 2006 alone.

PDVSA also intends to develop and implement a competency model to manage certification, skills analysis and profiling, performance evaluation and development. The competency system will have functions that enable PDVSA to match personnel with positions in new developments and business areas.

HR Policy, Social Development, Skills and Education

As well as creating a skills base for the hydrocarbon industry PDVSA HR is tasked with developing skills for other industry sectors. Craft training programmes are supported directly or indirectly by PDVSA and tied to an industrial and geographical base.

The Government is seeking to empower the Venezuelan population through national content initiatives and the industrialisation of the country. The Government intends that new businesses will be based on a co-operative model, leading to the creation of 'businesses with a social conscience', the so-called Empresas de Producción Social or EPSs. PDVSA will play a significant role in this process.



5.0



Human Resources

The workforce for the EPSs are the poor, underprivileged and largely unskilled. A huge investment in education and skills is required to help create a competent, efficient and competitive workforce. Most of these efforts are currently being channelled through the social missions. The EPSs will not just focus on oil and gas, although short-term this is where most of the effort is being directed. This will require a significant investment in infrastructure and the capability and capacity to provide training and education for the new companies.

Previous HR Practice

Prior to 2003, much of the in-house training and HR Development was carried out for PDVSA by the Centro Internacional de Educación y Desarrollo – or CIED. Effectively it was the PDVSA Corporate University and had international recognition. CIED had an extensive network of centres in all the producing areas, with the largest being an impressive resource with state-of-the-art facilities in Caracas. CIED, as an organisation, has since disappeared following the 'Paro'. There is, as yet, no single replacement or equivalent in place. This has left a large gap in PDVSA's in-house capability.

CIED was also responsible for competence assurance in PDVSA prior to 2003. An in-house knowledge content management system linked to SAP was developed and rolled out in 2002. The system, known as ABUC was built on 'bricks of knowledge' and linked to one or more units to close competency gaps. Training was acquired either through registering for traditional courses (which were approved on line by their supervisor/manager) or through e-learning modules. ABUC simply disappeared from PDVSA servers during the 'Paro' and has not been replaced.

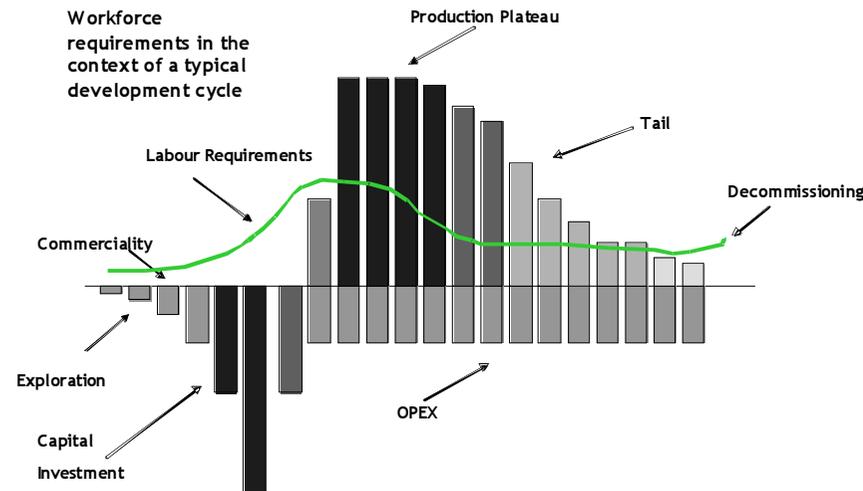
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Analysis of training need in PDVSA

Background

The workforce requirements of a typical development cycle are shown below. Often the workforce allocation is spread over 30 to 40 years in terms of life-of-field. Any significant interruption to the workforce complement or any reduction in the technical base will negatively impact on the viability of the field over time. This potential situation is where PDVSA finds itself following the 'Paro' in 2003.



Many of the producing fields in Venezuela are in production peak/plateau or managed decline. There will be a number of new projects coming on stream between 2006 and 2012. In addition to meeting the needs of ongoing operations, PDVSA will also have need for pre-concept, construction, pre-commissioning, pre-operations, surface and subsurface professionals and technicians to bring these new projects on-stream.

One of the biggest challenges PDVSA faces is deciding which types of E&P training and qualifications it needs for its workforce. Releasing staff for training is a constant struggle in the face of operational commitments. Frequently, training managers find it difficult to identify highly specialised training services from local providers, or they are not satisfied with the return on their investment because of poor quality. Sourcing training that meets international standards is particularly difficult in Venezuela.

To help clarify where training is most needed, it is important to look at where the division of responsibility lies in PDVSA. The majority of the workforce are in manual, semi-skilled, craft, technician, supervisory and administrative functions. Typically 70% of the workforce in an E&P division would fall into this category. The balance is made up of engineers, project managers and technical specialists (25%) and managers (5%).

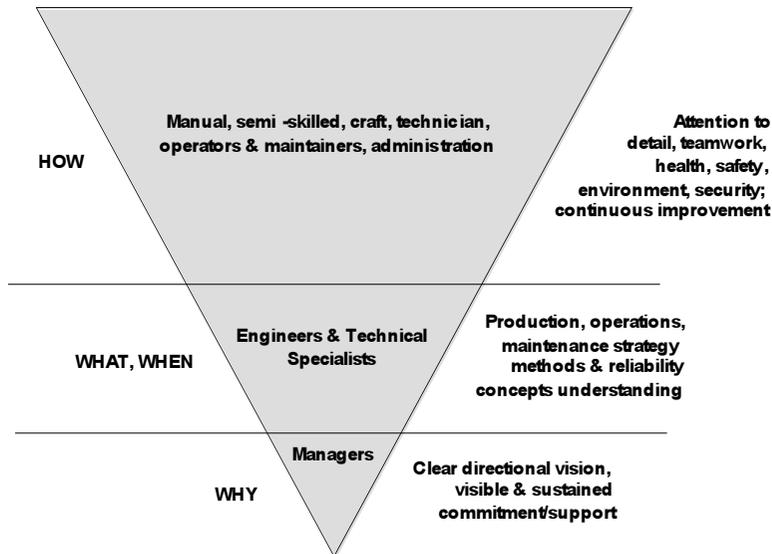
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Analysis of training need in PDVSA

RESPONSIBILITY

COMPETENCY



Overall the need to train often competes with operational demands. Different training strategies, mechanisms and methods are necessary to help balance these competing demands and to ensure that the training is delivered effectively with practical results. They include:

Strategies

- strengthening the intellectual knowledge base of the technical workforce
- enhancing the skills and knowledge of the current workforce
- development of new recruits to work within E&P
- defining the educative process within the Corporate Strategy
- visualising future strategic competencies and aligning them to the 2006-2012 Strategic Plan

Mechanisms

- craft skills training and education programmes through colleges and institutes
- an education process based on the competence measurement and assurances
- identifying and incorporating traditional and non-traditional learning strategies
- combining educational training management systems with the corporate strategy
- stimulating self-directed learning by personnel

Training Strategies, Mechanisms and Methods

There are a large number of different training and development strategies under consideration. Focus is being given to where the need is greatest, what training is required and at what level, its duration and what method is most appropriate.

6.0



Analysis of training need in PDVSA

Methods

- short course: in-house or by external provision
- medium to long term courses (INCE, Mission Vuelvan Caras)
- practice based: learning while doing
- formal education (i.e. Mission Sucre, Master Degrees in selected national and international universities)
- mentoring: basic technical skills being passed down by experienced hands
- on-line (e-learning) and blended learning

In the context of the challenges faced in Venezuela, it is also important to consider the methods and strategies that would allow the process to be accelerated, but without the loss of quality, knowledge attainment and benefit. It would be appropriate in many cases to consider the role of technology in learning and the growing use of blended approaches. This is being pioneered through Mission Sucre and Vuelvan Caras. Significant contributions to fund equipment and in some cases provide expertise come directly from PDVSA.

Mentoring, the transfer of skills and knowledge from experienced to less experienced employees, is increasingly regarded as one way in which skill and knowledge transfers can be accelerated. This methodology relies on the willingness of experienced (and increasingly former, retired) employees to participate. It also requires a robust system of implementation and recording to ensure that competencies are attained at the necessary level.

Analysis of Need in E&P Divisions

In PDVSA E&P Divisions the need is mainly in the technical areas and can be summarised as follows:

- Subsurface: sustaining production, well enhancement, reservoir and drilling
- Surface: optimisation, maintenance and reliability
- HSSE: reductions in lost time incidents, security

PDVSA E&P is also responsible for ensuring that the workforce discharges its social and corporate responsibilities effectively and in line with the National Plan. For new recruits, this is part of the induction into the organisation. For existing employees, this has to be supplemented.

Exploration & Production Training, Western Division - Summary

Most of the production in Western Division is centred on and around Lake Maracaibo. Although many of the wellheads are 'wet', production is not regarded as offshore and many of the activities are treated as land based. The Lake is a mature basin, the facilities are old, production is difficult, pollution is evident, logistics are a challenge and HSE standards could be improved. The main operating districts in Western are Maracaibo, Lagunillas, Bachaquero, Tía Juana, Tomoporo and Tierra Este Pesado.

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Analysis of training need in PDVSA

For technician training, all disciplines related to production and operations are required: mechanical, electrical/electronic, chemical, process and drilling, well engineering, well stimulation, sand and water control, production optimisation, planning and project management. For the development of the Cretaceous reservoirs, integrated field study skills are required.

Team building, health and safety, environmental management, pollution prevention and control, H2S, social responsibility training is a more general requirement spread across the workforce. Much of this training would apply to the contracting workforce. In the non-technical area, training in logistics and supply chain management is needed, especially to help deliver the EPS initiative.

Latin American Drilling School

A new drilling school is under development in Lagunillas. Initially the school will help to re-qualify drilling engineers in well control in line with IWCF standards. There are plans for the school to be equipped with British technology using DrilSim 5000 simulators. The school will provide a resource for all of PDVSA, and there are plans for it to become a regional training centre.

The drilling school will be designed to provide, assess and ensure integrated training in well drilling and workover operations for which it will have the following facilities:

- a drilling engineering school to train engineers in oil well drilling and workover
- a drilling fluid school with a support laboratory to train technicians and engineers in fluids

- one room equipped with drilling simulators of state of the art technology to teach, ensure and certify skills in early detection and control of kicks while drilling under different conditions
- exhibition room with video library for presentation of conferences and exhibitions, current and new technologies plus a library for technical support for study and training
- permanent exhibition area – tools & equipment used in drilling and workover for familiarisation
- external area for drilling operator and service companies to present their new equipment and technologies
- one type A dual drilling rig installed at an existing well for training and certifying drilling crews in scaled activities from roustabout to drillers, and including mechanics, electricians and instrumentalists

Exploration & Production Training, Eastern Division - Summary

Most of the production in Eastern Division takes place in the state of Monagas and around the towns of Maturín, San Tome, El Tigre and Anaco. Eastern Division is organised into the Northern Exploration and Western Production Districts. The big projects are El Furrial, Tacata and Morichal. In contrast with Western Division, Eastern Division has relatively modern facilities, is earlier in the production phase, and has scope for increased production.

Projects to increase both reserves and production will require an aggressive drilling programme and use of enhanced recovery techniques. Training in new technologies is a priority.

6.0



Analysis of training need in PDVSA

These include fluid injection - steam and chemical, drilling and data analysis. Project management, construction of new infrastructure, pipelines and storage facilities all feature in the plans for Eastern Division. As with all PDVSA employees, new skills will be needed to undertake social development projects that will form an important component of this Division's activity.

Exploration & Production Training, Central-Southern Division - Summary

The South Division is the smallest producer for PDVSA. Located mainly in Barinas State near the city of Barinas, South Division has attracted interest disproportionate to its output. One of the main difficulties for Central-Southern Division is its remoteness, being deep in the heart of the country and far from existing infrastructure. It's proximity to the Andes mountain range gives it an important environmental significance. The training needs in Central-Southern reflect those of the other divisions, but the scale of the challenge is smaller.

Matrix of Skills and Training, 2006 to 2012 – Surface All E&P Divisions

Surface (all Divisions)	Level
Corrosion Engineering	Professional/Técnico Superior
Mechanical and Electrical	Professional/Técnico Superior/Craft
Electronic Engineering	Professional/Técnico Superior
Safety Engineering	Professional/Técnico Superior
Software Engineering	Professional/Técnico Superior
Oil and Gas Engineering	Professional/Técnico Superior
Environmental Risk Management	Técnico Superior
Environmental Monitoring	Técnico Superior
Environmental Response	Professional/Técnico Superior/Craft
Environmental Impact Assessment	Técnico Superior
Gas Processing	Professional/Técnico Superior
Flow Assurance	Técnico Superior
HSE - Health, Safety, Environment	All
Instrumentation	Professional/Técnico Superior/Craft
Lubricants and Hydraulics Technology	Técnico Superior

6.0



Analysis of training need in PDVSA

Surface (all Divisions)	Level
Instrumentation	Técnico Superior
Maintenance Management	Professional/Técnico Superior
Multi-phase Pumps	Professional/Técnico Superior
Mud and Solid Wastes Control	Professional/Técnico Superior
Oil Spills Management	Professional/Técnico Superior
Operations	Professional/Técnico Superior
Facilities De-bottlenecking	Professional/Técnico Superior
Pipeline Inspection	Professional/Técnico Superior
Pipeline Design and Inspection	Professional/Técnico Superior
Gas Processing	Professional/Técnico Superior
Production Engineering	Professional
Project Management	Professional
Pumps	Técnico Superior
Facilities and Plant Reliability	Professional/Técnico Superior /Craft
Maintenance Management	Professional
Risk Management Systems	Professional
Rotating Machinery Diagnostics	Técnico Superior
Safety Procedure Design	Técnico Superior

Surface (all Divisions)	Level
Safety System Engineering	Técnico Superior
Safety Equipment Testing and Certification	Técnico Superior
Stock Control and Procedures	Técnico Superior
Wellhead Equipment Design	Professional/Técnico Superior
Emergency Pollution Response	Técnico Superior
NDT & Inspection	Técnico Superior
Oil Spill Training	Técnico Superior
Chemical Spill Training	Técnico Superior
Incident Response	Técnico Superior
Crisis Management	Professional/Técnico Superior
Spill Risk Assessment	Técnico Superior
Safety Awareness	Técnico Superior
Facilities Management	Técnico Superior
Tubular Inspection	Técnico Superior
Repair and Inspection/NDT	Técnico Superior
Welding and Soldering	Craft

6.0



Analysis of training need in PDVSA

Matrix of Skills and Training, 2006 to 2012 – Sub-surface All E&P Divisions

Sub-surface (all Divisions)	Level
Data Analysis	Professional/Técnico Superior
Drilling Inspection	Professional/Técnico Superior
Drilling Safety and Risk Management	Professional/Técnico Superior
Intelligent Drilling Techniques	Professional/Técnico Superior
Engineering - Well Completions	Professional
Geology/Geosciences	Professional
Reservoir Modelling	Professional
Flow Assurance	Professional/Técnico Superior
HSE - Health, Safety, Environment	All
Liquids Measurement	Professional/Técnico Superior
Instrumentation	Professional/Técnico Superior
Natural Gas Systems	Professional/Técnico Superior
Operations	Professional
Project Management	Professional
Reservoir Engineering	Professional
Sand Control	Professional/Técnico Superior

Sub-surface (all Divisions)	Level
Water Production	Professional/Técnico Superior
Conceptual Well Design	Professional
Water Injection and Control	Professional/Técnico Superior
Production Enhancement Engineering	Professional
Wireline Operations	Professional/Técnico Superior
Data and GIS	Professional/Técnico Superior

The Faja

It is estimated that the Faja alone will require an additional 5000 engineers and technicians in all disciplines and at all levels to meet 2012 production targets. The development of the Faja will account for approximately 30% of the total amount budgeted in 2006-2012 Strategic Plan. Many of the skills required for the Faja are accounted for in the surface and sub-surface lists above. There are two main projects: certification of reserves, and a doubling of production. The skills required in addition to those above are listed below.

6.0



Analysis of training need in PDVSA

Stated Areas of Need for the Faja 2006 to 2012

Faja Specific	Level
Transportation of Heavy Oil	Professional
Processing Technology	Professional
Chemical Engineering	Professional
Artificial Lift for Heavy Oil	Professional
Thermal Recovery Techniques	Professional
Non-Thermal Recovery Techniques	Professional
Well Engineering for Heavy Oil	Professional
Sand and Water Control	Professional
Multi-phase Pumps	Professional
Reservoir Engineering for Heavy and Extra Heavy Oil	Professional

Offshore

Advanced production technologies and automation are likely to feature significantly. There will be a need for high-end technicians and engineers to be developed in corrosion engineering, offshore drilling, subsea production engineering, offshore production and operations. Other offshore specific training such as health and safety, fire-fighting, survival, major emergencies management, marine logistics, environmental management and pollution control, prevention and management will also be required.

Güiria, Sucre State and the CIGMA Project

A big project linked to offshore activity is the development of the Complejo Industrial Gran Mariscal de Ayacucho (CIGMA) industrial complex near the port town of Güiria on the Paria Peninsular in Sucre State. Close to Trinidad and Tobago, this will be where the first gas train to handle offshore gas (from Plataforma Deltana; Mariscal Sucre etc) will be located. The site will also include an industrial and petrochemical complex.

Matrix of Skills and Training Offshore, 2006 to 2012

Offshore Specific	Level
Underwater Engineering	Professional
Engineering - Mechanical and Electrical	Professional
Electronic Engineering	Professional
Safety Engineering	Professional
Software Engineering	Professional
Oil and Gas Engineering	Professional
Environmental Risk Management	Professional
Environmental Monitoring	Professional/Técnico Superior
Environmental Response Systems	Professional/Técnico Superior
Environmental Impact Evaluation	Professional/Técnico Superior
Helicopter Operations	Técnico Superior

6.0



Analysis of training need in PDVSA

Offshore Specific	Level
HSE – Health, Safety, Environment	All
Instrumentation	Professional/Técnico Superior
Offshore Operations	Professional/Técnico Superior
Instrumentation	Professional/Técnico Superior
Maintenance Management	Professional
Multi-phase Pumps	Professional/Técnico Superior
Natural Gas Systems	Professional/Técnico Superior
Naval Architecture	Professional
Offshore Structure Design	Professional
Oil Spills Management	Técnico Superior
Operations	Professional/Técnico Superior
Pipeline Design and Inspection	Professional/Técnico Superior
Gas Processing	Professional/Técnico Superior
Production Engineering	Professional
Pumps	Professional/Técnico Superior
Rescue - Offshore Crews	Technosuperior
Offshore Facilities and Plant Reliability	Professional/Técnico Superior
Maintenance Management	Professional

Offshore Specific	Level
Risk Management	Professional
Rotating Machinery Diagnostics	Técnico Superior
Safety Procedures Design	Técnico Superior
Safety Systems Design	Técnico Superior
Safety Equipment Testing	Técnico Superior
Underwater Systems	Técnico Superior
Emergency Pollution Response	Técnico Superior
NDT & Inspection	Técnico Superior
Oil Spill Training	Técnico Superior
Chemical Spill Training	Técnico Superior
Incident Response	Técnico Superior
Spill Risk Assessment	Técnico Superior
Safety Awareness	Técnico Superior
Facilities Management	Professional/Técnico Superior
Repair and Inspection/NDT	Técnico Superior
Offshore Survival	All
Fire Fighting	Professional/Técnico Superior
Emergency Management	Professional/Técnico Superior

6.0



Analysis of training need in PDVSA

CVP and PDVSA Offshore will manage the project. It is an extensive investment, which will mirror the monetisation of gas achievements of nearby Trinidad and Tobago. The first stages of construction have already started in and around the harbour of Güiria. Planning and development represents a major challenge, but the biggest challenge is that faced by the community in the context of sustainable development. There is a concern that the industrialisation of the peninsula will negatively impact on local people and traditional industries. PDVSA is working in a number of areas critical to the success of CIGMA, including:

- industrialisation and sustainable development
- environmental protection and planning
- employment creation and reduced overall dependency (on PDVSA, the oil industry)
- traditional industry enhancement and supply chain development
- education and training
- participation and empowerment

Both PDVSA and the local communities need help on how best to manage the impact of the project and how best to ensure all involved gain benefits. PDVSA wishes to work with institutes and organisations with a proven track record who can draw from a wide range of experience and knowledge including from proprietary sources. PDVSA is targeting institutional partners engaged in research and development, local planning and government authorities, and learning and community organisations. It is seeking help to deliver practical lessons and solutions in:

- sustainable development
- social, environmental and industrial planning and development
- community participation
- community development
- community education and knowledge transfer
- environmental impact assessment and management
- social and corporate responsibility
- supply chain development
- logistics
- agricultural and fishing best practice
- maritime management and development
- human and animal nutrition and dietetics
- industrial and personal health and hygiene
- community health and primary care
- social housing design
- social policy formation

These areas of training are a departure from the normal range, but are areas of expertise residing within the UK that will become important in the immediate to near term in Venezuela. In Venezuela, many of the needs in Güiria apply to other areas where poverty dominates.

6.0



Analysis of training need in PDVSA

Health, Safety, Security and Environment – HSSE in PDVSA

Health, Safety and Environment (previously SHA) within PDVSA has now been split into two different components:

- Health is covered separately within the HR function (see HR Corporate structure) and also includes personal and industrial hygiene
- Safety and Security is now managed as a unitary subject within PDVSA. The issue of security has a high profile within PDVSA. There is considerable theft and a perceived risk of sabotage. The industry in general in Venezuela has above average accident rates. There have been a number of fatalities at PDVSA installations in 2006.

7.0



Working with PDVSA

Sponsors

Selling training into PDVSA requires a sponsor. Where that sponsor is placed in the organisational hierarchy will determine the degree of success and, crucially, the time taken to sign a contract.

At a strategic level in PDVSA the main sponsors are Corporate HR and Corporate Planning. These two functions are the primary holders of information on the strategic needs of the organisation: HR from a training perspective and Corporate Planning from a key performance indicator (KPI) perspective. Organisational planning and development are now discrete functions within the new HR structure.

Immediately following the 'Paro', training KPIs were very low. They have improved, but PDVSA is still short of where it needs to be to meet the strategic goals it has set itself under the 2006-2012 Plan.

Winning corporate training contracts is a lengthy process, requires patience and is usually complex. The advantage when successful is that you normally deal with decision makers with access to budgets, or budget holders.

Shorter-term returns can be achieved if you go deeper into the organisation into the field. In this case you are working with people with less authority, but who are closer to understanding immediate training needs.

The biggest volume of training is undertaken at the District Level. It is important that suppliers work as closely as possible with the HR Superintendents who are responsible for the implementation of training directives coming down through the organisation.

Operations managers have to agree to training requests and are responsible for the release of staff for training and the monitoring of the benefits at an operational level.

Procurement

The procurement process depends on how the services are bought. All proposals must go through a bidding committee. On occasion (and this is dependent on the asset), there may be an operations committee to go through before the bidding committee deliberates. There are two outcomes from this process:

- To proceed - perhaps with some recommendations
- To decline – with little or no prospect of progression

The normal requirement within PDVSA is that any tender must have three proposals submitted in competition – so called 'general bidding'. Selection has nearly always been made on price (see later for clarification on how this may not be the case). There is scope for single-sourcing. This must also go through the bidding committee and must be defended and justified before any recommendation can be made to proceed. Once the bidding committee has recommended a proposal, it can then be contracted.

7.0



Working with PDVSA

A letter is issued which may advise that a final proposal should be submitted to reflect any recommendations, otherwise the original proposal goes forward unchanged. The proposal then goes to the legal department for preparation and signing once all parties have agreed terms and conditions.

It is now mandatory for proposals to reflect the Government requirement that additional social benefits must be accrued from any business PDVSA engages in. Training is not excluded from this. Every proposal must have three components:

- Technical Component – describes the programme
- Commercial Component – details the price and the terms and conditions of the supplier
- Social Component – describes the social benefits that will be accrued and transferred to the community

The Social Component

With the introduction of the social component, the tendering process has taken on an added complexity. Contracts may now be awarded on the extent and impact of the social component and not on the basis of their technical or commercial merit. It is difficult to gauge what criteria are used by the committees in determining whether a social component in one contract is better than in a competing proposal.

There are at this stage no clear guidelines available, but we have been able to establish that it may not simply be a monetary calculation (i.e. a straight forward percentage of margin) or financial contribution to projects; and that it likely does include an assessment of impact, scale, design, target group, content and relevance to the community targeted and to local and national Government priorities.

Obviously for some organisations, producing the social component will present real challenges either at the conceptual or at the delivery stage. It will require a new set of skills within the organisation. What is clear, however, is that the social component is a mandatory requirement.

Relationships and Champions

Relationships are extremely important. Venezuelans form friendships easily. Having a champion definitely helps you to position your products and services. It would be unusual to win over confidence without some form of social interaction.

There has always been a tradition of movement of staff within PDVSA, so changes of personnel occur frequently. You have to expect this whenever you do business with PDVSA. Often moved staff can continue to exert influence at a distance.

8.0



The International Companies and Private Sector

International Operating Companies – IOCs

The IOCs have been working in Venezuela from the very beginning of the industry. The first discovery was made by Shell in 1914. The industry was nationalised in 1976. Some of the companies who have a presence include Shell, BP, Chevron, ConocoPhillips, ENI, Repsol and Total. All IOCs are obliged to have extensive social development programmes if they wish to operate in Venezuela.

Shell Venezuela – www.shell.com

Shell is the operator of the Urdaneta Field in Lake Maracaibo, producing 70 thousand barrels per day. It now operates this field as an 'empresa mixta'. Until recently, Shell was leading an international consortium bidding for the Mariscal Sucre offshore gas development. In October 2005, PDVSA announced that it would undertake this project itself and the consortium was dissolved. Shell has no other upstream activities.

Shell has implemented an impressive social development programme and has gained recognition in Venezuela for these initiatives. Shell is also seeking to implement a 'fresh talents' initiative with PDVSA to train young people in key areas of the oil and gas industry for future projects.

BP Venezuela – www.bp.com

BP has been active in Venezuelan oil exploration & production (upstream) since 1994. The current upstream portfolio is made up of 2 fields that have now moved into new empresa mixta JVs with PDVSA. The two fields are Boquerón, which is in the East (near Maturín) and DZO, which is located in the West of the Country (near Maracaibo).

Current oil production is around 50 thousand barrels a day. BP is a 16% partner in the Cerro Negro Heavy Oil Project with ExxonMobil and PDVSA in the Faja. In the future BP is likely to focus on opportunities in the Faja and Offshore. Around 150 staff are employed in Caracas. In the upstream, BP has around 150 employees in Maracaibo and 50 employees in Maturín.

BP is committed to ensuring its staff and contractors are trained to the highest international standards, especially in HSE. BP has assisted PDVSA directly in the past with various technology and knowledge transfer initiatives. Continuing to help PDVSA to uplift the skills of young staff in specialist technical areas is an area that could be developed.

Chevron Venezuela - www.chevron.com

Chevron seems to have been particularly successful in gaining the confidence of the Venezuelan Government and has continued to expand its operations in the country. Chevron took over the operation of the Boscán Field in 1996 under an operating services agreement (Chevron discovered the field in 1946). Boscán production averaged 113,000 barrels per day in 2005. Chevron was also the operator of the LL652 Field where production averaged 18,000 barrels of oil equivalent per day in 2005. These fields are now under new 'empresa mixta' JVs with PDVSA holding the majority share.

Chevron is also a 30% partner in the Hamaca Project, an extra-heavy crude production and processing project in the Faja. The project currently converts 190,000 barrels per day of extra heavy crude oil into 180,000 barrels per day of lighter, higher-value crude oil. The production area of the project encompasses some 254 square miles (657 sq. km) and is estimated to contain more than 2 billion barrels of recoverable oil.

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The International Companies and Private Sector

Offshore, Chevron has the license and holds a 60 percent interest in Plataforma Deltana Block 2, which includes the Loran Field natural gas discovery. Recent appraisal drilling has confirmed gas in commercial quantities and heralds development of Venezuela's offshore gas industry. The project is now in its field development phase. In August 2004, Chevron was awarded a 100 percent license interest for Plataforma Deltana Block 3 and is undertaking an exploration programme.

Chevron investments in Venezuela have helped to create jobs for more than 400 Venezuelans. The Hamaca Project crude oil upgrader and upstream facilities employs approximately 700 employees in operations. In 2004, Chevron was honoured by The Trust for the Americas, the non-profit arm of the Organisation of American States (OAS), for "exemplary corporate programs aimed at alleviating poverty and raising the level of education in Venezuela." One of the main projects in 2004 was the building and equipping of a high school facility that will educate some 1,200 students per year.

ConocoPhillips Venezuela – www.conocophillips.com

ConocoPhillips has a number of projects in Venezuela both onshore and offshore. In 1996 ConocoPhillips was awarded the Gulf of Paria West Block where the Coro Coro reservoir was discovered in early 1999. In 2002, ConocoPhillips and its partners concluded the appraisal program. By the end of that year, the commercial viability of this reservoir was declared. The Coro Coro offshore development has moved into its pre-production phase, with the jacket installed and top-sides in their pre-commissioning stage. ConocoPhillips began hiring for the Coro Coro development in 2004 and training is ongoing. Further development will see increases in the workforce over the next 6 years.

ConocoPhillips is also in partnership in the Gulf of Paria East Block and is the operator.

ConocoPhillips is involved in the Petrozuata Heavy Oil Project and is a partner in the Hamaca Project, operated by Ameriven (partners Chevron and PDVSA).

Statoil Venezuela – www.statoil.com

Statoil's most important Latin American investments are in Venezuela. Its business portfolio includes the offshore operation of Plataforma Deltana Block 4, which is currently an exploration and definition project. Total entered the project with a 49% share in 2004. Statoil also has a 15% interest in SINCOR heavy oil production in the Faja. It sold its 27% minority holding in the Chevron operated LL652 Field to PDVSA in April 2006.

Statoil has been involved in training programmes for the Venezuelan Naval Training School, primarily in marine crafts. Delays in the PD Block 4 drilling programme have put back development 12 to 18 months.

International Service Companies

All the major service companies, Schlumberger (1,200 staff), Halliburton, Weatherford, Baker Hughes and Wood Group (1,800 staff), have a strong presence in Venezuela. Most employees are Venezuelan nationals e.g. Wood Group has only 5 UK staff based in Venezuela. The training policies of these companies tend to be aligned with their own corporate strategy and much is undertaken using in-house resources. The main challenge they face is in the recruitment and retention of experienced and skilled workers.

8.0



The International Companies and Private Sector

There are restrictions on using former PDVSA employees. Consequently, there is intense competition for experienced professionals in Venezuela. High level training is mainly provided in-house or overseas. Some local purchasing does take place, mainly in HSE training and soft skills courses

The Private Sector in Venezuela

The private sector, local and foreign, has a fundamental role in the development of the hydrocarbons industry in Venezuela. The sector is mature, consolidated and participates in all areas of business including:

- the provision of goods and services
- investment and operations in oil, gas, chemicals and petrochemicals

Specific activities include:

- Orinoco Belt heavy oil strategic associations
- mature field operating agreements
- oil exploration agreements with risk and profit sharing
- gas exploration and development onshore and offshore
- gas industry development
- petrochemicals and chemicals
- development of refinery streams

Cámara Petrolera – Petroleum Chamber

Founded in June 1978, the Petroleum Chamber has a membership of over 850 companies that are established in Venezuela and provide goods and services to the O&G industry. Its mission is to promote and support the competitive growth of its members in national and international markets. The national headquarters are in Caracas, with chapters in: Zulia, Anzoátegui, Monagas, Carabobo, Barinas and Falcón.

The Cámara initiated a member wide training initiative in 2005 specifically around competence assurance. New contracting requirements from PDVSA mean companies must demonstrate the competence of their workforce. This project is ongoing.

The members of the Cámara have to compete not just with each other but also with PDVSA and the IOC's to attract people with the necessary skills. The policies for training in the private sector tend not to be as visible as the public sector, usually for commercial reasons. It's a mission of the Cámara to tackle issues of skill needs and development within its membership. The private sector needs to recruit practitioners who are able to execute projects within a commercial framework. The companies must retain staff to maintain competitiveness. Companies also have to tackle an endemic reluctance to provide training for staff that they fear may leave for a competitor, taking the investment in skills with them. This is an industry wide problem (A list of the key Cámara members with contact details is in Appendix 2)

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The International Companies and Private Sector

The list of services offered by Cámara members provides an indicator of their training needs:

- Exploration:
geology, geophysics, geochemistry, economic evaluation, drilling, well services
- Production:
drilling, well services, production engineering, facilities design and maintenance, pipelines, gas plant engineering, gas and water injection engineering
- Refineries and Petrochemical:
process engineering, utilities, transportation
- Services:
engineering, well services, telecommunications and IT services, maintenance, operation services
- Construction:
civil works, mechanical erection, electrical engineering, instrumentation, general maintenance, site works and preparation

9.0



The Education System

The Venezuelan Education system

The Venezuelan education system consists of levels and modalities. The levels are: pre-school education; basic education; medium diversified and professional education; superior education. Modalities are: special education; education for the arts; military education; religious education; adult education; extra-curricular education.

Pre-school and basic education are compulsory. Basic education must last no less than nine years, divided into three stages of three years each. When students have finished basic education they can enter the third level: medium diversified and professional education. Upon graduation from this level students earn the degree of “bachiller” (medium diversified) or “técnico medio” (professional) in the relevant speciality. Both degrees are equivalent for the purpose of continuing to the level of superior education.

The education levels with their UK equivalent are:

Venezuelan Qualification	UK Equivalent
Bachiller	Higher/A level
Técnico	HNC
Técnico Superior	HND – sub-degree
Licenciatura	Bachelor
Maestría	Master
Doctorado	PhD

INCE (Instituto Nacional de Cooperación Educativa) – www.ince.gob.ve

The National Institute for Educational Co-operation (INCE) is an autonomous body, which was created in 1959 and assigned to the Ministry of Education. The regulations governing the Institute were modified in 2003 and it now follows guidelines from the Ministry of Labour, and the Ministry of Planning and Development.

The purpose of the Institute is to develop training programmes according to the needs of the country’s different production sectors, to assist in the formation of a more professional workforce. It is also tasked with creating training programmes for the unemployed and under-employed, aimed at promoting self-employment.

INCE participates in one of Venezuela’s largest missions ‘Vuelvan Caras’. The aim of the mission is to develop blue collar and semi-skilled workers to a higher level of competence for industry. Training is provided in nearly all states in Venezuela and delivered in state owned institutions. An estimated 150 thousand people were trained in 2005. Vuelvan Caras is not aimed specifically at the oil and gas industry. Its objective is to develop a core workforce in readiness for the planned growth in the industrial base of Venezuela.

INCE's funding comes both from the government and private sector. Each private enterprise with more than 10 employees must contribute a sum equal to 5% of its yearly salary bill.

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The Education System

INCE's mission is to train young apprentices such as carpenters, plumbers, electricians, car mechanics, welders, lathe operators, shoemakers, bricklayers, and blacksmiths. There is a long list of handicraft occupations that fall within the scope of its mission. It has training centres (workshops) all over the country which are usually well equipped. INCE has little to do with typical oil industry occupations.

INPSASEL (Instituto Nacional de Prevención, Salud y Seguridad Laborales)

The National Institute for Prevention, Health and Labour Safety (INPSASEL) is a department within the Ministry of Labour and is the equivalent of the HSE in the UK. INPSASEL has its roots in the Venezuelan oil and gas industry. What was regarded as 'best practice' by PDVSA has become part of the working culture of INPSASEL. The Institute's remit, however, covers all industrial work sites. It has a strong team of experts, but these mainly come from academic backgrounds. This has resulted in enthusiasm for change, but slower than expected progress.

INPSASEL has been responsible for drafting the regulations of the new "Ley Orgánica de Prevención, Condiciones y Medio Ambiente de Trabajo (Lopcyamat)" law. This has required the coordination of inputs from the private sector (represented by Conindustria and Fedeindustria), workers and the public sector. Through the introduction of this new law INPSASEL is clearly committed to implementing a workable framework for enhanced worker health and safety. In practice, however, it will probably only be those industries and firms that already have a good or an acceptable level of HSE management that will take note of the law's requirements and will develop ways to implement it.

Without the ability to create and enforce a fair and workable set of 'reglamentos' it is unlikely that the Institute will be able to do more than single out or, in the worst case, penalise companies for non-compliance. It won't be able to enforce the training and supervision required to ensure the adoption of commonly accepted health and safety standards.

University Sector

Graduate and post-graduate studies in universities and the like (Armed Forces, the Church, the Arts, etc.) constitute the level of superior education. The Ministry of Superior Education has responsibility for this level, through the National Universities Council. Superior Education, however, is based on the principle of "academic liberty" so the major universities in Venezuela are autonomous.

Oil & Gas Superior Education

Venezuela has an established oil and gas education offering, much of which is delivered to a very high standard. There is a concentration on geological sciences at the undergraduate level. At the postgraduate level, there are a limited number of institutions offering a broad range of courses that meet the diverse needs of the industry, with Universidad del Zulia (LUZ) being the exception with a fully diversified offering.

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The Education System

Undergraduate:

Universidad Central de Venezuela (UCV, public) – www.ucv.edu.ve

- Petroleum Engineering (Caracas)
- Geological Engineering (Caracas)
- Geophysics Engineering (Caracas)
- Geochemistry (Caracas)
- Geodesic Engineering (Caracas)

Universidad del Zulia (LUZ, public) – www.luz.edu.ve

- Petroleum Engineering (Cabimas)
- Geodesic Engineering (Maracaibo)

Universidad de Oriente (UDO, public) – www.udo.edu.ve

- Petroleum Engineering (Anzoátegui, Monagas)
- Geology (Bolívar)
- Geological Engineering (Bolívar)

Universidad de Los Andes (ULA, public) – www.ula.edu.ve

- Geological Engineering (Mérida)

Universidad Simón Bolívar (USB, public) – www.usb.edu.ve

- Geophysics Engineering (Caracas)

Postgraduate:

UCV

- Specialisation in Integrated Management of Hydrocarbon Reservoirs
- Master in Geophysics
- Specialisation in Pipeline Systems

LUZ

- Specialisation in Petroleum Geology
- Specialisation in Chemistry/Petrochemistry
- Master in Petroleum Engineering
- Master in Drilling Engineering
- Master in Gas Engineering
- Master in Geodesic Engineering
- Master in Chemistry/Petrochemistry
- PHD in Chemistry/Petrochemistry

UDO

- Master in Petrochemical Engineering
- Specialisation in Gas Engineering

USB

- Specialisation in Reservoir Engineering
- Master in Chemical Engineering

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The Education System

ULA

- Master in Chemical Engineering
- PHD in Chemical Engineering

Bolivarian University of Venezuela (UBV) – www.misionsucre.gob.ve

There is generally a lack of public higher education in Venezuela. The State has recognised the need to expand the sector if it is to achieve its industrialisation targets. The creation of the Bolivarian University of Venezuela signals the beginning of a new expansion programme in higher education provision in the nation. The first new campus – or nucleus – has been built in Monagas State, in the Eastern production region. Its modern state-of-the-art facilities have been equipped by PDVSA with learning and research technologies. New programmes are being developed, including a new masters degree programme in offshore technology. The UBV project is funded through the Sucre Mission.

UNEFA – www.unefa.edu.ve

The Experimental National University of the Armed Forces (UNEFA) is a new public university network in Venezuela. Set up in the aftermath of the 'Paro', its main campus is in the centre of Caracas in the former headquarters of PDVSA E&P. Its courses tend to reflect the needs of the armed forces, but its students are not necessarily in the military. In some producing areas, UNEFA has replaced CIED, at least in terms of infrastructure. But that is where any similarity to CIED ends as CIED never delivered academic programmes directly. UNEFA has both an undergraduate and post-graduate prospectus.

Popular Universities

There are some universities that are more 'popular' with the Government than others. This tends to reflect the rather complex political scene in Venezuela. Generally, there are, in addition to UBV and UNEFA three Universities that fall into this category:

- Central University of Venezuela (UCV)
- University of Zulia (LUZ)
- University of the East (Oriente)

Private Sector Universities

The public sector is complemented by a private sector. Most of the private universities are small in comparison and vary in terms of offer and quality. Their existence depends almost entirely on student tuition fees. The take up of university education in Venezuela is low. Nevertheless, the private sector accounts for some 50% of the provision. The private universities are concentrated in the urban centres e.g. Caracas, Maracaibo and Valencia. Very few of the private universities provide technical education of direct relevance to the oil and gas industry. There appears to be a concentration on business and management.

Private Sector Colleges

The majority of colleges in Venezuela are public. The private sector is dominated by a few institutions, the largest being IUTA.

9.0



The Education System

Instituto Universitario de Tecnología de Administración Industrial (IUTA)
www.iutanacional.com

University Institute of Technology and Industrial Administration

IUTA is an educational organisation established in 1990 that trains and educates up to and including tecnico-superior levels. This is a sub-degree level equivalent to HND in the UK. It is a private institution funded through the fees it collects from its student body. IUTA is regulated by the Ministry of Superior Education and its qualifications are state recognised.

IUTA has a number of campuses throughout Venezuela. The principal campus is in Anaco (North Central Venezuela). IUTA has other campuses in Valencia, Maracay, Barcelona and Puerto la Cruz. IUTA plans additional expansion into the main oil centres of Maracaibo, Maturín, El Tigre and the industrial town Puerto Ordaz. To achieve this growth, IUTA is working with partners who can match the level of their standard provision, but help expand the course base, especially within the technical programme area. Their main target is the oil sector, including PDVSA and the IOCs who have their operations in the main oil centres. The main course offerings are business and technical programmes; the latter are aligned to the oil and gas industry and include:

- Industrial Health and Safety
- Maintenance Systems and Administration
- Logistics
- Petroleum Technology
- Gas Technology
- Instrument Technology

IUTA is ambitious and seeks close collaboration with partners with a proven track record in the supply of oil and gas education courses at technician level. Ideally, the partner should have international experience and full portfolio of accredited programmes in production, operations, mechanical, electrical, chemical and process.

Private Sector Training

The private sector in Venezuela is not as expansive as one might have assumed, given the scale of production and the planned expansion of the industrial base. There is potential in this area for the UK sector to gain initial access to the market. There are around 20 training companies operating in Venezuela offering a range of programmes. A number of them are either owned by or use former CIED (ex-PDVSA) staff that left after the 'Paro', with the ensuing political sensitivities that this can bring. Most of the training takes place in hotels, or occasionally on-site.

Energy Training Centre (ETC) – www.etc.com.ve

ETC is joint venture between Venezuelan company, Grupo KC and Wood Group Engineering and Production Facilities – South America. It was established in late 2005. The training facility is state of the art and can accommodate up to 60 trainees in different room size configurations.

9.0



The Education System

ETC was created to meet the growing demand for training in and around the Puerto La Cruz oil centre in East Venezuela. The principle IOCs working offshore, Chevron and ConocoPhillips have their operations bases in Puerto La Cruz. Puerto La Cruz is also close to the José petrochemical, oil processing and discharge complex and to PDVSA's Maturín, El Tigre and San Tome oil producing areas. ETC is also well placed to provide training into the Faja heavy oil belt. Some of the Faja operators have their HQs in Puerto La Cruz. ETC can provide training in almost every area of the oil, gas and energy industries. Their primary focus is, however, in HSE.

In response to the publication of the 2006-2012 business plan, ETC will introduce a number of new programmes in high value technical areas concerned with production enhancement. New programmes in technician training will be offered to the industry. In addition, highly specialised engineering training will be made available to PDVSA and the wider industry, especially in offshore and enhanced recovery. ETC is seeking partners to help support the delivery of these new courses. ETC is also an accredited English language provider, certified for IELTS and TOEFL.

10.0



Market Considerations

Language

The official language of Venezuela is Spanish. Most of the training is in Spanish. The exception to this would be specialised technical or management training. The level of English competence in PDVSA is lower than it was prior to the 'Paro'. English will likely be required for any JVs involving Russian, Chinese, Iranian and Indian partners.

Market Entry

There are several ways to do business in Venezuela. Approaching PDVSA directly has been covered in a previous section. Registering a company in Venezuela is quite straightforward, but not recommended. Establishing a working relationship with a Venezuelan entity already conducting work for PDVSA is perhaps the quickest way into the market. There are both benefits and drawbacks associated with this. The benefits: a local partner should already be registered with PDVSA and should be in a position to deliver the social component of any contract. The drawbacks: the local partner is likely to be contracting in local currency, so repatriation of revenues could be problematic.

Considerations in the Market

A significant number of UK training companies and institutions providing services to the oil and gas industry already have valuable experience in doing business overseas. Increasingly, the countries that companies are working in have poor or limited infrastructure, limited or poor quality basic education levels, internal conflict and personal safety risks. As the search for oil and gas extends beyond the 'traditional' producing provinces and new ones open up, managing risk and uncertainty inevitably becomes a central consideration.

The pace of 'doing' business is also extremely variable and often patience is the key to winning business.

Venezuela is a country for companies who are aware of and who understand how to manage uncertainty. A culture of continuous change pervades PDVSA, which can affect and sometimes disrupt the business development process. Companies need to nurture a strong contact base or a champion to keep up to date with developments that may affect the progress of securing or delivering business. This is all part of reaping the rewards that clearly do exist once a working relationship with PDVSA has been established.

The method of negotiation is conducted professionally, but it can be fluid and subject to last minute shifts. Much of this is down to the mercurial culture that is being Venezuelan. This is not intended as an insult – many Venezuelans would acknowledge this observation. It is sometimes hard to keep up with changes of negotiating position and this can be hugely frustrating. You need patience and a good understanding of the Venezuelan culture to negotiate successfully.

Competition

The traditional partner until recently was the US. While considerable business is still being done with the US, the market is opening up. New competition now comes from Spain and France. Spain with its long-standing connection with Venezuela, as the former colonial power, has cultural advantages including language. There are good government-to-government relations and significant trade. France also has good relations. The French Petroleum Institute (IFP) was awarded a significant contract by PDVSA in 2004 – reputed to be worth US\$14million.

11.0



The UK and Venezuela

UK and Venezuela – relations, market position and previous engagement

The diplomatic and political relationship between the UK and Venezuela is cordial. There is a historical connection going back to the independence struggle led by the popular hero Simon Bolivar in which a British military contingent played a significant part. This connection is recognised in Venezuela on Carabobo Day each July. Venezuela supplied the UK with bunker fuel during WWII. Although the traditional drink is rum, the national drink is Scotch whisky, with Venezuela being the sixth largest consumer of Scotch whisky in the world.

In terms of trade, overall Venezuela accounts for some £236m of exports and £395m of imports for the UK. Venezuela is the UK's third largest market in Central/South America after Mexico and Brazil.

Trade links with Venezuela in the oil and gas sector have been developed through the British Embassy in Caracas and UKTI's Americas Desk in the Oil and Gas Directorate based in Glasgow. Exchanges have focussed on technology, offshore, supply chain, asset management and an ongoing informal energy dialogue. PDVSA regularly participates in Offshore Europe and had one of the biggest national presences in 2005.

Working together to uplift skills in the Oil and Gas Sector

After nearly 30 years of exploration and production in one of the most hostile environments on the planet, the UK oil and gas industry has attracted respect around the world for its achievements, pioneering technologies, best management practices and remarkably high standards in operations, safety, health and environment management.

To ensure the industry becomes world class and to harness its most valuable asset - its people - a specialised network of oil and gas education and training institutions and businesses has grown up in the UK. This network has grown with the development of North Sea oil operations, adapting to the ever increasing demands of the most dynamic and technology driven industry in the world, uplifting the qualifications and skills base of a national and international work force and ensuring greater safety and efficiency.

Our position in the market owes as much to lessons learnt from our mistakes (such as the Piper Alpha disaster) as it does to our achievements. The UK's oil and gas industry has achieved high levels of quality and excellence in training and education through the development of learning methods and learning technologies such as e-learning, and now, blended-learning. UK education and training companies and institutions have been exporting this capability to major oil and gas centres around the world including Venezuela for many years.

11.0



The UK and Venezuela

New business, new challenges, an increase in production capacity, the creation of new job positions and a sector boom all demand an improvement in operational standards and process optimisation. There is a particular focus on the relationship between oil, health, safety and environment, through the prevention of environmental disasters and physical harm to employees.

As with the UK, the appropriate training and qualification of people in the industry is a principle concern for PDVSA. Frequently, training managers find it difficult to identify highly specialised training services from local providers, or they are not satisfied with the return on investment due to the lack of reasonable quality standards achieved.

Moreover, to maintain a competitive advantage for their businesses, both employers and employees wish to obtain international certification for these specialised and costly skills. Increasingly, demonstrating the skills base of your workforce is a pre-requisite to winning contracts and agreements.

Consequently, we believe that closer ties between UK and Venezuela in this area can bring mutual benefits. There is a desire to increase the number of Venezuelans taking courses provided by British specialist oil industry education and training providers. An increasing number of Venezuelan institutions have also been looking to carry out joint research and exchanges with British institutions in the oil and gas sector.

How Venezuela can benefit from UK experience

The UK has a well-documented history in oil and gas detailing both success and failure. A key product of UK Plc is 'lessons learned'. It is in this context that Venezuela would value the UK's contribution most. By enlisting the expertise of its education and training providers who offer access to internationally recognised qualifications, the UK is able to provide a full range of training programmes to meet the demands of Venezuela's oil and gas industry including:

- offshore exploration and production engineering
- petroleum engineering
- health, safety and environmental management
- fire fighting, marine, operations and maintenance technician training
- project, maintenance and asset management
- international business, contracts, law and supply chain
- occupational standards and competence assurance

Scottish Qualifications Authority in Venezuela - SQA

The Scottish Qualifications Authority (SQA) has been working to introduce Scottish Vocational Qualifications (SVQs) in Venezuela as part of a Scottish Executive initiative to bring SQA accreditation into the Venezuelan oil and gas industry. This is important for the UK in general and helps to establish UK standards and accreditation in Venezuela. This move, if successful, should help facilitate access to the market for organisations and institutes who currently provide SVQs, or who are already SQA accredited.

11.0



The UK and Venezuela

The Venezuelan partner in this project is ETC. Their initial focus is HSE and their target group is the "Faja Four" group of Strategic Associations. If successful SQA/ETC hope to extend this programme further into PDVSA.

Support

The UK Government has put in place a number of initiatives to promote closer links between the UK and Venezuelan oil and gas sector. This is driven through the UKTI's Americas Unit Oil and Gas Directorate based in Glasgow and implemented through the Trade & Investment Section in the British Embassy in Caracas. Training and Education is currently a priority area and has benefited from investment. There are a number of stakeholders involved including the Global Training & Education Partnership (GTEP), The British Council, Scottish Development International (SDI), NOF Energy and the industry itself.

UKTI initiated this business project to promote the full range of UK training and education programmes available for the oil and gas sector within Venezuela. The objective is to help operators in Venezuela, PDVSA in particular, to identify sources of expertise that can provide solutions for their training needs. At the same time the project should provide support to UK providers who are considering entry to the Venezuelan market.

UKTI and The British Council are organising events in Venezuela to help to raise the profile of the UK's capability in oil and gas training. The objective is to bring providers of UK capability face to face with potential customers and partners. For more information contact the British Embassy in Caracas.

PDVSA was a co-sponsor of a DVD entitled 'A North Sea Story' along with UKTI, Shell, Wood Group, Aberdeen City Council, The Robert Gordon University and Univation Ltd. One of the recurring themes in the DVD is the importance that training and education had in creating a successful and competitive oil and gas industry in the UK. This DVD will be used widely to promote UK capability in training and education.

Finally, a brochure will be available (in Spanish) detailing UK education and training institutions that provide courses specifically for the oil and gas market to help Venezuelan companies identify UK providers offering capacity in their area of interest. This will be available from UKTI on request.

British Venezuelan Chamber of Commerce (CVBC) - www.britcham.com.ve

The British Venezuelan Chamber of Commerce (CVBC in Spanish) is a non-profit organisation offering practical help and advice to Venezuelan and British businesses wanting to develop bilateral trade relations. It offers a wide range of services to enable business and individuals to fulfil their professional objectives. The CVBC works closely with the British Embassy. Services include:

1. Business Networking
2. Business Contacts and Opportunities
3. Business Appointments
4. Translations

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Conclusions and Recommendations

This report sets out to describe the opportunities for UK providers of training and education services to the oil and gas industry in Venezuela. The focus is on the up-stream industry and primarily on PDVSA. It remains the case that the oil and gas industry in Venezuela has a significant and urgent need for training in nearly all aspects of the upstream industry. The situation in Venezuela has been described as the largest training need of any country for the industry. The report has documented the antecedents of this need. It has mapped the need in the context of the social development agenda and responsibility of PDVSA in delivery. It is vitally important that this is taken into consideration while conducting business with PDVSA or indeed with any other public or private entity.

The report has tried to highlight the areas of training where the need is known and is a priority. There are immediate, short, medium and long-term needs and they are linked to the "Plan for Sowing the Oil", the 2006-2012 National Plan. Analysis of this Plan has helped to identify where the training is most needed and how it can be delivered. The role of social missions and public universities is closely tied to delivery. The opportunity for the private sector exists largely in technical training at levels and in most aspects of E&P operations. Additionally, there are specialist training areas in social, environmental and sustainable development that are relevant to Venezuela.

The Government requires PDVSA and all participants in the oil and gas industry to be aligned with Government policy and the National Plan. The Government of Venezuela welcomes the participation of foreign companies in this project, so long as they comply with the Law and wishes of the State.

Going forward, the opportunity for UK Plc to participate in this enormous project is significant. PDVSA has taken steps to tackle the major gaps in aspects of upstream production, more typically in the technical arena. The syndication of supply from a core of world leading training and educational organisations is key to PDVSA's immediate to short-term strategy. Most of the syndicated organisations are national institutes (IFP, CPI) or industry led partnerships (e.g. NEXT, IWCF). Robert Gordon University has recently won a large contract to supply masters based training over five years.

PDVSA has indicated that much still needs to be done to cover all aspects of operational need, especially in HSE, logistics, supply chain, social and corporate responsibility and in technician training. The biggest need is for practice based training – creating job ready graduates and technicians. It is in this area that the UK has most to contribute.

In the next phase of this initiative it is for the UK to make its presence better known within PDVSA and the associated industry.

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Acknowledgements

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ExxonMobil

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Chevron (Venezuela)

Elizabeth Paro

ConocoPhillips (Venezuela)

Bud Rogers

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Appendices

Appendix 1a - Directory of Operating Companies in Western District

BP VENEZUELA HOLDINGS LIMITED (Convenio Desarrollo Zulia Occidental DZO)

Representative: Sr. Ricardo Tapia, Manager Bloque DZO
Address: Calle 74 con Av. 4 Bella Vista, Edif. Banco Popular, Maracaibo
Telephones: (0261) 7942000, 7942211, 7942201
Fax: (0261) 7942057

CHEVRONTEXACO GLOBAL TECHNOLOGY SERVICES (Convenios Boscán y LL-652)

Partners: Inelectra (Boscán); Statoil and BP Venezuela (LL-652)
Representatives: Sr. Joe Wright, General Manager / Sra. Gloria Carballo, Public Affairs
Address: Prolongación Circunvalación No. 2, Edificio ChevronTexaco, Urbanización Richmond, San Francisco, Maracaibo
Telephones: (0261) 7302000, 7302001, 7302011
Fax: (0261) 7359570

CHINA NATIONAL PETROLEUM COMPANY, CNPC América Ltd. Venezuela Branch (Convenio Intercampo Norte)

Representatives: Sr. Xu Yihua, General District Manager / Sra. Rita Oberto, Deputy District Manager
Address: Carretera N entre Avenidas 43 y 44, Edificio CNPC, al lado de Lago Industries, Zona Industrial, Ciudad Ojeda.
Telephones: (0265) 6413301, 6413264, 6413944
Fax: (0265) 6413034

CONSORCIO TECPETROL COPAREX CMS OIL AND GAS (Convenio Colón)

Partners: Coparex and Perenco
Representative: Sr. Ricardo Ferreiro, General Manager
Address: Av. 4 Bella Vista entre Calles 75 y 76, Torre Ejecutiva, Maracaibo
Telephone: (0261) 7943000
Fax: (0261) 7943036

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NIMIR (Convenios B2X-68/70 y B2X-70/80) – PROXIMAMENTE HOCOL

Partners: Ehcopak and Cartera de Inversiones Venezolanas

Representatives: Miss Mabel Ruiz, General Manager/ Sr. Alejandro Mejía, Administration and Finance Co-ordinator / Sr. Jean Falcón, Production Superintendent

Address: Calle 77 (antes 5 de Julio) entre Avenidas 3C y 3D, Torre Financiera BOD, Piso 9, Maracaibo

Telephone: (0261) 7924093

Fax: (0261) 7931756

Address: Avenida Intercomunal, Campo United, Casa N° 5, Las Morochas, Ciudad Ojeda.

Telephones: (0265) 6319072, 6318856, 6318456

Fax: (0265) 6319360

PERENCO VENEZUELA (Convenio Ambrosio)

Representative: Sr. Phillipe Marion, General Manager

Address: Avenida Principal San Francisco No. 3-95, al lado de Yanmarine, Sector Manzanillo, Maracaibo

Telephone: (0261) 7645643

Fax: (0261) 7649712

PETROBRAS ENERGÍA VENEZUELA (Convenio La Concepción)

Partner: Williams International

Representative: Sr. Eloy Rosillo, General Manager

Address: Avenida Circunvalación 2 No. 114-124, Centro Comercial Ciudad 2000, Local 16, Sector Los Robles, Maracaibo

Telephone: (0261) 7941500

Fax: (0261) 7941501

REPSOL YPF, S.A. (Convenio Mene Grande)

Representative: Sr. Ferdinando Rigardo, General Manager

Address: Calle 65 entre Avdas. 3F y 4 (Bella Vista), Edificio Finisterre, Maracaibo

Telephone: (0261) 7905600

Fax: (0261) 7921203

SHELL VENEZUELA, S.A. (Convenio Urdaneta Oeste)

Representatives: Sr. Luis Prado General Manager / Dr. Jesús Leal Lobo, External Affairs Manager

Address: Calle 78 (Dr. Portillo), Torre Claret, Maracaibo

Telephone: (0261) 7948111

Fax: (0261) 7948000

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SUELOPETROL, C.A., S.A.C.A. (Convenio Cabimas)

Representative: Sr. Luis Eduardo Díaz, Operations Manager
Address: Avenida Intercomunal cruce con Carretera F, Cabimas
Telephones: (0264) 2417650, 3700291
Fax: (0264) 3700315

VINCCLER, C.A. (Convenio Falcón Este)

Partner: Pacific
Representative: Sr. José Chiquín, Operations, Production and Logistics Manager
Address: Sector Santa Rita detrás de Cementos Caribe, Cumarebo
Telephone: (0268) 8081502 - 04
Fax: (0268) 8081506

WEST FALCON SAMSON HYDROCARBONS - Filial de SAMSON (Convenio Falcón Oeste)

Representatives: Sr. Juan Basora, General Manager / Sr. José Alí Quintero, Human Resources Manager.
Address: Calle 64 esquina Av. 3F N° 3F-08, diagonal al Hogar Clínica San Rafael, Maracaibo
Telephones: (0261) 7921575, 7927444
Fax: (0261) 7921604, 7914033

Appendix 1b Directory of Operating Companies in other States of Venezuela

BP VENEZUELA HOLDINGS LIMITED

(Campos LL-652, Jusepín, DZO, Maulpa-Kaki y Boquerón)

Partners: Total (Jusepín), ChevronTexaco – Statoil (LL-652) e Inepetrol y Polar Uno (Maulpa y Kaki)
Representative: Sr. Guillermo Quintero, President
Address: Av. Francisco de Miranda, Edificio Centro Seguros Sudamérica, Pisos 3 y 4, El Rosal, Caracas
Telephones: (0212) 9019000, 9019002
Fax: (0212) 9019016

BP VENEZUELA HOLDINGS LIMITED (Campo Boquerón)

Partner: Preussag Energie Gmbh. (OMV)
Representative: Sr. Joe Pérez
Address: Av. Raúl Leoni, Edificio Palma, Mezzanina 2, Maturín Edo. Monagas
Telephone: (0291) 6603007
Fax: (0291) 6603082

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CHEVRONTEXACO LATINOAMERICA (Campos Boscán, LL-652, Asociación Estratégica Hamaca y Bloques 2 y 3 de la Plataforma Deltana)

Partners: Inelectra (Boscán); Statoil, BP Venezuela (LL-652) and ConocoPhillips (Bloque 2 Plataforma Deltana)

Representative: Sr. Ali Moshiri, President

Address: Avenida La Estancia, Centro Banaven (Cubo Negro), Torre D, Piso 7, Chuao, Caracas

Telephone: (0212) 9025400

Fax: (0212) 9025456, 9025432

CHEVRONTEXACO GLOBAL TECHNOLOGY SERVICES COMPANY (Bloque 2 Plataforma Deltana)

Partner: ConocoPhillips

Representative: Sr. Carlos Aguilera

Address: Centro Bahía de Pozuelos, Torres C y D, Piso 2, Avenida Nueva Esparta con Calle Centro Sur, Sector Las Garzas, Barcelona, Estado Anzoátegui

Telephone: (0281) 2622377

Fax: (0281) 2622379

CHINA NATIONAL PETROLEUM COMPANY VENEZUELA BRANCH

Representatives: Sr. Gongxun Lu, President; Sra. Zhang Hingling, Vice-president; Sr. José A. Mora, Sra. Wang Shaoxian

Address: Av. Francisco de Miranda cruce con la 3ª. Av. de Bello Campo, Edificio Edicampo, Piso 6, diagonal al Centro Lido, Campo Alegre, Caracas

Telephones: (0212) 2661830, 2660033, 2677115, 2661611

Fax: (0212) 2676423

CHINA NATIONAL PETROLEUM COMPANY VENEZUELA BRANCH (Campo Caracoles)

Representative: Sr. Jeanping Fan

Address: Sector Veá, entre Callejón 11 y 11 Sur, El Tigre, El Tigrito, Edo. Anzoátegui

Telefax: (0283) 2310822, 2350212

COMPAÑÍA GENERAL DE COMBUSTIBLES (Campo Onado)

Partners: Carmanah Resources, Banco Popular del Ecuador and Korea Petroleum Development

Representative: Sr. Pedro Schreiterer

Address: Avenida Fuerzas Armadas No. 59, Maturín Edo. Monagas

Telephone: (0291) 6411746

Fax: (0291) 6414176

CONOCOPHILLIPS (Campo Golfo de Paria Oeste, Bloque 2 Plataforma Deltana y Asociaciones Estratégicas Hamaca y Petrozuata)

Partners: AGIP (subsidiaria de ENI) and OPIC (subsidiaria de Chinese Petroleum Corporation) (Golfo de Paria Oeste) and ChevronTexaco (Bloque 2 de la Plataforma Deltana)

Representative: Sr. John Hennon, President

Address: Calle La Guairita, Edificio Los Frailes, Piso 2, Chuao, Caracas

Telephone: (0212) 9507000

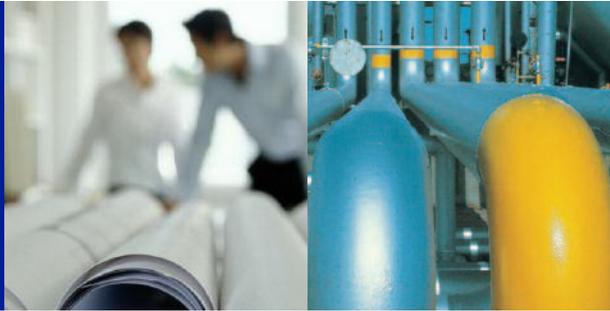
Fax: (0212) 9507151, 9507152, 9507153, 9507154, 9507156

Address: Avenida Nueva Esparta, cruce con calle Cerro Sur, Centro Bahía de Pozuelos, Torre CD, Piso 1, Barcelona, Estado Anzoátegui

Telephone: (0281) 4207000

Fax: (0281) 4204771

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CONSORCIO INVERSORA MATA – PETROBRAS ENERGIA (Campos Acema y Mata)

Partners: Consorcio Petrobras APC Corod, Consorcio Coroil,
Petrobras Energía Venezuela

Representative: Gustavo Nieves, General Manager

Address fiscal: Avenida Urdaneta cruce con Av. Mariño, Zona Central, Centro
Comercial Malaver II, Locales 150 y 151, Piso 2, San José de Guanipa, Edo.
Anzoátegui

Telephone: (0283) 2406730

Fax: (0283) 2406711

COROIL S.A. (Campo Acema)

Partners: Corporación Corepli and Pérez Companc

Representative: Sr. Jaime Gaviria

Address: Av. El Mirador cruce con Calle El Empalme, Edificio Torre 18, PH 1-A,
La Campiña, Caracas

Telephones: (0212) 7311861, 7311306, 7312284, 7313904 (0261) 7987169, 7976833

Fax: (0212) 7312204

ENI DACION B.V. (Campo Dacion) – ANTES LASMO VENEZUELA B.V.

Representative: Sr. Giuseppe Mirabelli

Address: Centro Lido, Torre E, Pisos 11 al 13, Av. Francisco de Miranda, El
Rosal, Caracas

Telephone: (0212) 9582000

Fax: (0212) 9582120

Address: Centro Comercial Pelfer, Piso 2, Oficina 15, El Tigre Edo. Anzoátegui

Telephones: (0283) 2414313, 2261533, 2261339

Fax: (0283) 2414105

EXXONMOBIL (Campo La Ceiba y Asociación Estratégica Cerro Negro)

Partners: PetroCanada

Representative: Sr. Mark R. Ward

Address: Avenida Blandín, Centro San Ignacio, Torre Este (Kepler), Piso 9, La
Castellana, Caracas

Telephones: (0212) 2776624, 2776904, 2776830

Fax: (0212) 2776901, 2776992

HARVEST VINCCLER C.A.

(Campo Uracoa-Bombal, Monagas) – ANTES BENTON VINCCLER

Representative: Sr. Jean Michel Bonnet

Address: Av. Alirio Ugarte Pelayo, Sector Tipuro, Edificio Harvest Vinccler,
diagonal a PDVSA, Maturín, Estado Monagas

Telephones: (0291) 6401700, 3007000

Fax: Management Office: (0291) 3007002, Human Resources: (0291) 3007003,
Information Technology: (0291) 3007004, Geology: (0291) 3007008, Operations:
(0291) 3007030, Drilling: (0291) 3007056, Finances: (0291) 3007074

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INEPETROL - Filial de INELECTRA (Campos Maulpa y Kaki y Golfo de Paria Este – Campos de Gas Yucal Placer)

Partners: ChevronTexaco (Boscán), BP Venezuela and Polar Uno (Maulpa and Kaki) Total, Repsol YPF and Otepi (Yucal Placer)

Representative: Sr. Antonio Vincentelli

Address: Av. Circunvalación del Sol, Centro Profesional Santa Paula, Torre Inelectra, Piso 5, Urb. Santa Paula, Caracas

Telephones: (0212) 9815705, 9815555, 9853333, 9815848, 9815701 (Direct)

Fax: (0212) 9850384

OPEN (Campo Casma Anaco)

Partners: COSA, Cartera de Inversiones Venezolanas and Phoenix International

Representative: Sr. Rafael Ramírez, Vice-president

Address: Av. Bolívar, Edif. Lotería de Oriente, Piso 3, Maturín Edo. Monagas

Telephones: (0291) 6414350, 6413574, 6414391, (0212) 9525507

Fax: (0291) 6413673

OTEPI (Campo de Gas Yucal Placer)

Partners: Total, Repsol YPF and Inepetrol

Representative: Sr. Luis Eduardo Paúl

Address: Zona Rental Universidad Metropolitana. Edificio Otepi, Terrazas del Avila. Edo. Miranda

Telephones: (0212) 2042337, 2042090, 2042077

Fax: (0212) 2042349

PERENCO VENEZUELA (Campos Pedernales y Ambrosio)

Representative: Sr. Hartur de Fauterau, General Manager

Address: Avenida Principal de El Bosque, Torre Credicard, Piso 15, Oficina 152, Chacaíto, Caracas

Telephone: (0212) 9530120

Fax: (0212) 9535448

PETROBRAS ENERGÍA VENEZUELA (Campos La Concepción, Oritupano-Leona y San Carlos – Campo de Gas Tinaco) - ANTES PEREZ COMPANC

Representatives: Sr. Miguel Bibbó, General Manager Venezuela / Sr. Augusto Cicchipi, Technical Manager

Address: Av. Venezuela, Torre Lamaletto, Piso 8, El Rosal, Caracas

Telephone: (0212) 9577300

Fax: (0212) 9577301, 9577302

PETROBRAS ENERGÍA VENEZUELA (Campos Oritupano-Leona y San Carlos – Campo de Gas Tinaco)

Partners in Oritupano-Leona: Norcen and Corod

Address: Av. Fernando Padilla, C.C. Riccobonno, Planta Baja, El Tigrito, Edo. Anzoátegui

Telefax: (0283) 2551100

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PETRO-CANADA VENEZUELA (is not an operator)

Partners in el Campo La Ceiba and la Asociación Estratégica Cerro Negro (ExxonMobil)

Representative: Sr. Thomas Gebken

Address: Calle Los Chaguaramos con Avenida Mohedano, Centro Gerencial Mohedano, Piso 7, Oficina CD, La Castellana, Caracas

Telephone: (0212) 2630322

Fax: (0212) 2613073

REPSOL YPF (Campos Mene Grande, Guarapiche, Quiriquire, Guárico Occidental y Quiamare-La Ceiba – Campos de Gas Barrancas y Yucal Placer)

Partners in Yucal Placer: Total, Otepi and Inepetrol

Representatives: Sr. Valentín Álvarez Cortina, General Manager Latin America

Sr. Ricardo Pons, Operations Manager Quiamare-La Ceiba

Address: Centro Empresarial Bahía de Pozuelos, Pisos 1 y 2, Sector Las Garzas, Barcelona Edo. Anzoátegui

Telephones: (0281) 2625700, 2621033, 2621084, 2621085, 2621086, 2621087

Fax: (0281) 2625784, 2625837

REPSOL YPF (Campo Guárico Occidental)

Representative: Sr. Elida Hernández, Production Manager

Address: Av. Rómulo Gallegos con Calle Orituco, Edif. Paolo Malavasi, Valle de la Pascua Edo. Guárico

Telephones: (0235) 3410975, 3417223, 3412666

Fax: (0235) 3411477

SHELL VENEZUELA, S.A.

(Campo Urdaneta Oeste y Proyecto de Gas Mariscal Sucre)

Representative: Sr. Sean Rooney, President

Address: Edif. Parque Ávila (Torre HP), Pisos 14 y 15, Av. Francisco de Miranda, Los Palos Grandes, Caracas

Telephone: (0212) 2782260

Fax: (0212) 2782304

STATOIL VENEZUELA, AS (operator at Bloque 4, Plataforma Deltana)

Partners: ChevronTexaco-BP Venezuela (Convenios LL-652) and Total (Asociación Estratégica Sincor y Bloque 4 de la Plataforma Deltana)

Representative: Sr. Thore E. Kristiansen, President

Address: Av. Francisco Solano, Centro Empresarial Sabana Grande, Piso 16, Sabana Grande, Caracas

Telephones: (0212) 9583100, 9526393

Fax: (0212) 9527107

SUELOPETROL, C.A., S.A.C.A. (Convenio Cabimas)

Representative: Sr. Henrique Rodríguez Guillén, President.

Address: Avenida Intercomunal cruce con Carretera F, Cabimas.

Telephones: (0264) 2417650, 3700291

Fax: (0264) 3700315

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Appendices

TEIKOKU OIL DE VENEZUELA C.A. (Campo Guárico Este y Sanvi-Güere)

Representatives: Sr. Orlando Gutiérrez, General Manager / Sr. Hiroyuki Suzuki, Finance Manager

Address: Avenida Eugenio Mendoza, Torre La Castellana, Piso 4, Oficina 4-C, La Castellana, Caracas

Telephones: (0212) 2637401, 2637031

Fax: (0212) 2639141

Address: Av. Las Industrias, Edificio Magdalena, Piso 1, Valle de la Pascua Edo. Guárico

Telephones: (0235) 3415679, 3410066, 3411201, 3412945

Fax: (0235) 3415664, 3418925

TOTAL OIL AND GAS VENEZUELA (Campo Jusepín y Asociación Estratégica Sincor – Campos de Gas Yucal Placer Norte y Sur, Bloque 4 de la Plataforma Deltana)

Partners: BP Venezuela (Jusepín), Statoil (Sincor, Bloque 4 Plataforma Deltana) and Repsol YPF, Otepi and Inepetrol (Yucal Placer)

Representative: Sr. Georges Buresi, President

Address: Centro Profesional Eurobuilding, Piso 10, La Guairita, Chuao, Caracas

Telephones: (0212) 9096000 to 9096014

Fax: (0212) 9096020.

VINCCLER, C.A. (Campo Falcón Este)

Partner: Pacific

Representative: Sr. Giacomo Clérico, President

Address: Avenida La Salle, Edificio Fiorela, Planta Baja, Colinas de los Caobos, Caracas

Telephone: (0212) 7931411

Fax: (0212) 7936331

YPERGAS (Campos de Gas Yucal Placer Sur y Norte)

Partners: Grupo Trío Yucal Placer (Total, Repsol YPF, Inepetrol (Inelectra) and Otepi)

Representative: Ing. Jorge Rojas, President

Address: Avenida Francisco de Miranda, Urb. Los Palos Grandes, Torre HP, piso 16, Caracas Telephone: (0212) 2781700 (Central)

Fax: (0212) 2781754

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Appendices

Appendix 1c - Directory of Companies in Strategic Alliances Operating in the Faja

OPERADORA CERRO NEGRO (PDVSA-ExxonMobil-PetroCanada)

Representative: Sr. Mark R. Ward, President.

Address: Av. Blandín, Centro Comercial San Ignacio, Torre Kepler, Piso 8, Chacao, Caracas

Telephones: (0212) 2776624 (800) 66245

Fax: (0212) 2776620, 2776630

PETROLERA AMERIVEN (PDVSA-ConocoPhillips-ChevronTexaco)

Representatives: Sr. Pedro Martorano, President / Sr. Roy Lyons, General Manager

Address: Centro Comercial Bahía de Pozuelos, Torre A, Pent-House, Av. Nueva Esparta con Calle Cerro Sur, Barcelona Edo. Anzoátegui

Telephone: (0281) 2622611

Fax: (0281) 2636402

PETROLERA ZUATA – PETROZUATA (PDVSA-ConocoPhillips)

Representative: Sr. Alfredo Morales, President

Address: Centro Comercial Bahía de Pozuelos, Torres C y D, Av. Nueva Esparta con Calle Cerro Sur, Barcelona, Edo. Anzoátegui

Telephone: (0281) 2807000

Fax. (0281) 2807010, 2807007

SINCRUDOS DE ORIENTE - SINCROR (PDVSA-Total-Statoil)

Representatives: Ing. Luis Pulido, President / Sr. Gian Francois Duhot, General Manager

Address: Av. Francisco Solano, Centro Empresarial Sabana Grande, Piso 26, Caracas

Telephones: (0212) 7062000, 7062028

Fax: (0212) 7062257

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Appendices

Appendix 1d – Mixed Companies –Minority Shareholder with PDVSA (as at June 2006)

Company	Field	Location
TEIKOKU	GUARICO	Guárico
PERENCO	PEDERNALES	Delta Amacuro
HARVEST VINCCLER	MONAGAS	Maturín
CHEVRON	BOSCAN	Maracaibo
VINCLER OIL & GAS	FALCON	Santa RitaFalcón
PETROBRAS	ORITUPANO/LEONA	El Tigrito, Anzoategui
TECPÈTROL	COLON	Maracaibo
WEST FALCON	FALCON	Maracaibo
BP	DZO	Maracaibo
REPSOL	GUARICO	Guárico
REPSOL	QUIRIQUIRE	Barcelona
TOTAL	JUSEPIN	Caracas
REPSOL	QUIAMARE/LACEIBA	Barcelona
TEIKOKU	SANVI GUERE	Caracas
SHELL	URDANETA	Maracaibo
PETROLERA COROLI	ACEMA	San José de Guanipa

Company	Field	Location
HOCOL	B2X.70/80	Maracaibo
CNPC	CARACOLES	El Tigre, Anzoategui
PERENCO	AMBROSIO	Maracaibo
BP	BOQUERON	Maturín
CARTERA INVERS.VZLA	CASMA-ANACO	Maracaibo
HOCOL	B-2X.68/79	Maracaibo
SUELOPETROL	CABIMAS	Maracaibo
ENI	DACION	San Tomé, Anzoategui
CNPC	INTERCAMPO NORTE	Maracaibo
CHEVRON	LL-652	Maracaibo
INEMAKA	KAKI	Caracas
PETROLERA MATA	MATA	San José de Guanipa
CIA GRAL COMBUSTIBLES	ONADO	Maturín
PETROBRAS	LA CONCEPCION	Maracaibo
INEMAKA	MAULPA	Anaco

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Appendices

Appendix 2 – Private Contractors in Venezuela Oil and Gas Industry

General Contractors

1. C.A. Venezolana de Mantenimientos Mayores (CAVEM)

Representative: Ing. Carlos Alejandro Morales Vargas, Director

Address: Avenida 3C con Calle 67, Unicentro Virginia, Primer Piso, Local 1-11, Maracaibo

Telephone: (0261) 7910526, 7934735

Fax. (0261) 7920446

Address: Sector Curva El Pato, Vía a Pequiven, Los Puertos de Altagracia, Municipio Miranda

Telephone: (0266) 4146768 (0414) 6347375

E-Mail: mantenimientos@cavem.com.ve

E-Mail: cmorales@cavem.com.ve

Date of constitution: 01 August 2001

Capital: Bs. 200.000.000,00

Patrimony: Bs. 478.415.433,00

Sales: Bs. 386.586.313,00 (2003)

Employees: 13

Activity: Works and services. Concrete infrastructure as foundation slabs. Metallic structures. Paint. Construction, remodelling and maintenance of thermal, acoustic and lighting isolation. Construction, remodelling and maintenance of industrial plants. Construction, remodelling and maintenance of administrative offices. Construction, remodelling and maintenance of silos (verticals or horizontal). Concrete works and drainage.

2. Concretos y Construcciones Faría, S.A. Empresa del Grupo Faría

Representative: Ing. José Augusto Faría Sanda, President

Address: Calle 65 No. 71-A-26, Urbanización Ciudadela Faría, Maracaibo

Telephone: (0261) 7540044, 7540063, 7540409, 7540340, 7540195, 7540396, 7540496

Fax. (0261) 7542894

E-Mail: jfaria@grupofaria.com.ve

E-Mail: jfjimenez@grupofaria.com.ve

Date of constitution: 31 May 1973

Capital: Bs. 500.000.000,00

Patrimony: Bs. 10.838.839.978,00

Sales: Bs. 4.354.256.390,00 (2003)

Activity: Construction and erection: construction of pump stations, foundations and infrastructure works, prefab hydraulic works and infrastructure works, hydraulics. Marine Transport services.

Supplier of pre-mix concrete and punctured stones.

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3. Construcciones Ex, S.A. (CONEX)

Representatives: Ing. Herman Rodríguez, Business Director
Ing. Fernando París Vilorio, President

Address: Parcelamiento Industrial Buena Vista, Km. 4 Carretera a El Moján,
detrás de Recnaca, Zona Industrial Norte, Maracaibo

Telephone: (0261) 7578711 (master)

Fax: (0261) 7578342

E-Mail: conexmbo@cantv.net

Date of constitution: 04 March 1980

Capital: Bs. 2.100.000.000,00

Patrimony: Bs. 9.618.977.779,00

Sales: Bs. 5.081.974.147,00 (2003)

Employees: 40

ISO Certification ISO: in process.

Activity: Construction and erection: major civil works, road services, city
planning and lands scaping, piles construction, land movement and demolitions.

4. Construcciones Vasco Luti, S.A. (CONVALSA)

Representative: Sr. Vasco Luti, President

Lic. Valeria Luti, Finance Manager

Dra. Vanesa Luti, Legal Adviser

Address: Carretera G esquina Avenida 21, Tía Juana, Municipio Simón Bolívar

Telephone: (0265) 6314983, 6310001, 6314784

Fax: (0265) 6310701, 6314660

E-Mail: convalsa@cantv.net

Web Page: www.convalsa.com

Date of constitution: 11 October 1979

Capital: Bs. 5.552.000.000,00

Patrimony: Bs. 11.883.487.771,00

Sales: Bs. 1.953.648.880,00 (2003)

Activity: Construction, road services, and land movement.

5. Constructora Camsa, C.A. (Antes Constructora Heerema) affiliated to Willbros International

Representative: Sr. Michael Hall, Director

Address: Avenida 28 No. 12A-95, Sector El Manzanillo, Avenida Principal a San Francisco, Maracaibo

Offices at: El Tigre Estado Anzoátegui

Telephone: (0261) 7625555

Fax: (0261) 7625690

E-Mail: mail@construtoracamsa.com

Web Page: www.construtoracamsa.com

Web Page: www.willbros.com

Date of constitution: 06 December 1948

Capital: Bs. 1.000.000.000,00

Patrimony: Bs. 1.315.367.000,00

Sales: Bs. 41.538.300.000,00 (2003)

Employees: 206

ISO Certification: INTEVEP.

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Activity: Construction and erection. Specialists in marine engineering and offshore installations, such as steel and armoured concrete platforms, ports installations, heavy foundations, bridges and pretensed concrete piles. Building of pipelines for oil and gas. Engineering projects administration, logistics and procurement. Dredging. Transportation services. Fabrication of any type of element, using pretensed concrete or structural steel. Jetties and other equipment as tugboats, personnel transport boats and barges. Dry dock for boats. Salvage services for boats and tugboats.

6. Constructora Hermanos Furlanetto, C.A. (CONFURCA)

Representatives: Sr. Adriano Furlanetto, President
Ing. Gilmer Rodríguez M., Vicepresident
Sr. Giovanni Furlanetto, Director
Address: Calle Piar No. 100, Ciudad Ojeda
Office at: Barcelona Estado Anzoátegui
Telephone: (0265) 6623859, 6626229, 6620635
Jetty: (0265) 6622602, 6629861
Fax: (0265) 6620321
E-Mail: confurca@iamnet.com Ciudad Ojeda
E-Mail: muelles@iamnet.com Las Morochas
E-Mail: confurca@telcel.net.ve Puerto La Cruz
Capital: Bs. 5.000.000.000,00
Patrimony: Bs. 24.297.960.170,00
Sales: Bs. 61.884.452.203,00 (2003)
Employees: 200
ISO Certification: INTEVEP

Activity: Construction and erection both on land and offshore. Specialists in pipelaying, underwater, above and underground. Electric transmission lines. Construction of electric substations. Water injection units, flow stations, compressions plants, instruments works, piles sinking, and general civil works. Land movements, construction of foundations, fabrication of various structures, covering pipes with concrete. Assistance with new plants start-ups.

7. Constructora Nase, C.A.

Representative: Ing. Hernán Rincón F., President
Address: Calle 68-A No. 3H-17, Quinta Karina, detrás de la Iglesia Corazón de Jesús, Sector Bella Vista, Maracaibo
Telephone: (0261) 7911858,7926496
Fax: (0261) 7912306
E-Mail: cnasevc@telcel.net.ve
E-Mail: nasepre@telcel.net.ve
Capital: Bs. 2.000.000.000,00
Patrimony: Bs. 7.816.861.653,00
Sales: Bs. 6.950.927.729,00 (2003)
Activity: Construction of: Water treating plants, city planning and land scaping, major civil and hydraulic works, piles, land movement and demolition, oil and gas lines, industrial erections, metallic structures, tanks, maintenance of installations and mechanical equipment's. Installation of firefighting systems.

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8. Constructores Eléctricos e Industriales, C.A. (CEICA)

Representative: Econ. Alfredo Hernández Raffalli, General Manager

Address: Avenida 3Y entre Calles 78 y 79, Centro Comercial Salto Ángel, Nivel 3, Oficina 1, Maracaibo

Address: Carretera al Aeropuerto de Oro Negro cruce con la Carretera La Williams, Punta Gorda

Office at: Maturín Estado Monagas

Telephone: (0261) 7922657, 7925248

Fax: (0261) 7928250

Mobile: (0414) 6660795

Fax: (0264) 2999284

E-Mail: ahernandez@iamnet.com

E-Mail: jorgeh@cantv.net

Date of constitution: 12 June 1978

Capital: Bs. 1.000.000.000,00

Patrimony: Bs. 10.193.648.338,00

Sales: Bs. 22.425.151.841,00 (2003)

Activity: Construction and erection: of electric installations, substations, electrical equipment, electronic systems, grounding systems. Maintenance of marine and submarine works.

9. Constructores Venezolanos, C.A. (CONVECA)

Representatives: Ing. Renzo Basso Zulian, Director

Sr. Giuseppe Basso Guerra, President

Address: Calle 144 No. 62-225, Parcela No. 8, I Etapa Zona Industrial, Maracaibo

Offices in: Anaco y Barcelona Estado Anzoátegui

Telephone: (0261) 7361434, 7363034, 7360358, 7360766,

Fax: (0261) 7362887, 7363618

E-Mail: conveca@conveca.com.ve

E-Mail: mperez@conveca.com.ve

Web Page: www.conveca.com.ve

Date of constitution: 03 July 1970

Capital: Bs. 5.000.000.000,00

Patrimony: Bs. 25.057.580.934,00

Sales: Bs. 18.258.989.002,00 (2003)

ISO Certification: INTEVEP.

Activity: Construction and erection. Specialist in oil and gas pipelines, water lines. Other mechanical works like industrial plants, flow stations and compressing plants. Civil works like land movements, dynamic compaction, city planning, deep sewage collectors, drainage's, various water treating plants, pump stations. Electric and instrumentation works related to civil and mechanical projects. Supply of vacuum-hydrate trucks. Industrial and general welding. Transport treatment, storage and final disposition of dangerous oil and petrochemical industries residues, including toxic residues.

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10. Contratista Bermúdez, C.A. (Conberca)

Representative: TSU. Milexa Salazar, Managing Director
Address: Avenida 20 con Calle 50, Sector La Cruz, El Bajo, Municipio San Francisco, Maracaibo
Telephone: (0261) 7172250 (master), 7617450 (master)
Fax: (0261) 7615319
E-Mail: master@conberca.com.ve
E-Mail: info@conberca.com.ve
Date of constitution: 05 September 1986
Capital: Bs. 1.996.167.769,00
Patrimony: Bs. 10.534.360.801,00
Sales: Bs. 6.144.918.806,00 (2003)
Employees: 136
Activity:

- Construction of locations
- Road works
- Land movements
- Civil works in general
- Blinding of pits
- Equipment rentals

11. Corrosion Control, S.A. (COCSA)

Representatives: Sr. Jesús Chávez Isambert, General Manager
Sr. José Pastor Castillo C., President
Address: Calle 151 con Av. 68 No. 68-01. 1era. Etapa Zona Industrial Sur, Municipio San Francisco, Estado Zulia
Offices in: Maturín and El Tigre
Telephone: (0261) 7363798, 7363783
Mobiles: (0414) 6535104 - 6535105 - 6535106
Fax: (0261) 7360639
E-Mail: cocsa@cocsa.net
Web Page: www.cocsa.net
Date of constitution: 28 October 1993
Capital: Bs. 750.000.000,00
Patrimony: Bs. 3.408.884.412,00
Sales: Bs. 4.641.931.980,00 (2003)
Employees: Not available
Activity: Repair of all kind of nautical vessels, corrosion control, sandblasting, industrial paint, chemical anti corrosion treatment, renting of industrial compressors, welding, general maintenance of civil works, painting and maintenance of green areas.

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12. Costa Bolívar Construcciones, C.A. (CBC)

Representatives: Ing. Leonardo Scionti C., Director
Sr. Vincenzo Scionti M., President

Address: Avenida Principal (Carretera Nacional) cruce con Calle Venezuela,
No. 41, Edificio CBC, Bachaquero

Telephone: (0267) 3521914, 3521745, 3521765

Fax: (0267) 3521733

E-Mail: lscionti@costabolivar.com

Web Page: www.costabolivar.com

Affiliated since: 1984

Capital: Bs. 3.200.000.000,00

Patrimony: 17.919.409.117,00

Sales: Bs. 13.829.050.585,00 (2003)

Employees: 53

ISO Certification: In process.

Activity:

Erection and construction contractor y land and offshore. Specialists in land movements, road works and asphaltting. Rental of equipment's and heavy machinery. Construction and maintenance of nautical ships.

Services. Mud analysis, collecting oil spillage's, treatment of solid waste material. Installation and maintenance of equipment for treatment and purification of waters.

Suppliers of equipment for control of ambient pollution, air purification, detecting pollution, water-treating plants, desalting plants, waterproofing materials, asphalt, construction machineries. Pipes for aqueducts.

13. Costa Norte Construcciones, C.A. (CNC)

Representatives: Sra. Licia Pietrosémoli, Administration and Finances
Vice-president

Ing. Alfredo Pietrosémoli, Commercial Managing Director

Address: Calle 148, Prolongación Circunvalación No. 3, II Etapa de la Zona Industrial, Municipio San Francisco, Maracaibo

Offices in: Punto Fijo Estado Falcón and Barcelona Estado Anzoátegui

Telephone: (0261) 7345318, 7379622, 7379556, 7378677, 7379652, 7378222

Fax: (0261) 7349309, 7377955

E-Mail: licia_p@costanorte.com.ve

Web page: www.costanorte.com.ve

Date of constitution: 03 June 1968

Capital: Bs. 4.889.600.000,00

Patrimony: Bs. 18.964.412.936,00

Sales: Bs. 18.376.307.758,00 (2003)

Employees: 160 (full time personnel)

ISO Certification: FONDONORMA / INTEVEP

Activity: Construction and erection of: metallic and concrete structure, pipes of different material and diameters; civil, electric and instrumentation works; electric transmission lines, insulation of pipes and equipment's for industrial plants; mounting of traditional equipment up to greater complexity ones, mounting equipment inside structures. Managing of special projects such as transport and hoisting of loads up to 1.000 tons. Supply of services for major shutdowns and/or expansion of industrial plants. Prefabrication of pipes, metallic structures mechanical tools and concrete's elements- Sandblasting and paint job.

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14. De-Ko Construcciones Electro Industriales, C.A.

Representatives: Sr. Humberto De Cecchi, President, Sr. Fernando De Cecchi, Firsts Vice-president and Administration Manager

Address: Calle Independencia con Prolongación Avenida Alonso de Ojeda, Ciudad Ojeda

Telephone: (0265) 6319361, 6318857, 6318977, 6319177

Fax: (0265) 6319466

E-Mail: de-ko@iamnet.com

Date of constitution: 15 March 1960

Capital: Bs. 1.250.000.000,00

Patrimony: Bs. 8.021.963.768,00

Sales: Bs. 3.335.292.352,00 (2000)

ISO Certification: INTEVEP

Activity: Construction and erection both in land and offshore. Construction and maintenance of electric installations. Civil and metallic constructions. Industrial cleaning.

15. Descoque Descaling Technology, C.A. (DDT)

Representative: Sr. Erwin Lingg, General Manager

Address: Av. 3Y (San Martín) entre calles 82-B y 83, Centro Comercial Los Pirineos, Local N° 10, Maracaibo

Telephone: (0261) 7927857 / 7929718 / 7921868

Fax: (0261) 7925742

E-Mail: ddt.lingg@iamnet.com

Date of constitution: 30 November 1993

Capital: Bs. 120.000.000,00

Patrimony: Bs. 725.693.881,68

Sales: Bs. 1.432.898.740,43 (2003)

Employees: 14

Activity: Internal cleaning of pipes with water driven pigs. Able to clean u-bends and plug heads, of ovens, heaters, reactors, transfer lines, oil, gas and water lines.

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16. EDM Construcciones, C.A.

Representative: Sr. Elio di Marco, President

Address: Calle 115 No. 59-115, Sector Los Robles, Maracaibo

Telefax: (0261) 7377423

Date of constitution: 23 July 1996

Capital: Bs. 175.000.000,00

Patrimony: Bs. 472.424.658,00

Sales: Bs. 262.723.496,00 (2003)

Activity:

Construction of: civil works, maintenance of green areas, deforestation, weeding and pruning, roadwork's, industrial paint, electric works and installations.

Supplier of machinery's and deforestation equipment's, heavy machinery, welding equipment and accessories, special steels, insulating materials, smelted iron, etc.

17. Ehcopek, S.A.

Empresa del Grupo Moschella

Representatives: Ing. Marcos Mrvaljevich, General Manager

Sr. Vito Zaccaria, Director

Address (Administration): Avenida 5 de Julio esquina Avenida Baralt, Edificio San Luis, Piso 3, Maracaibo

Address (Operations): Calle Independencia con Calle Los Cocos, Sector La Playa, Ciudad Ojeda

Telephone (Administration): (0261) 7591350, 7593279, 7180000, 7180003

Telephone (Operations): (0265) 6317586, 6315354, 4150106

Fax Administration: (0261) 7592318

Fax Operations: (0265) 6629206

E-Mail: marcosm@ehcopek.com Management

E-Mail: vzaccaria@ehcopek.com Director

E-Mail: drodriguez@ehcopek.com Administration and Human Resources

E-Mail: acudde@ehcopek.com Operations

E-Mail: ggonzalez@ehcopek.com Estimates

Web page: www.ehcopek.com

Date of constitution: 30 January 1985

Capital: Bs. 3.310.000.000,00

Patrimony: Bs. 17.021.824.069,00

Sales: Bs. 21.056.065.514,00 (2003)

Employees: 82

ISO Certification: INTEVEP.

Activity: Oil, Industrial and Civil Constructions. Execution of Marine and submarine works. Laying of oil, gas and water lines, both in land and water. Construction of trenches, land movements and road works. Construction of Flow Stations (Lake and Land). Construction of water, gas and steam injection plants. Water treating plants. Assembly, interconnection, and start up of prefab modular facilities. Construction and erection of storage tanks. Civil, mechanical, electrical and instrumentation works. Construction of electric substations. Service and maintenance of flow lines. Electro mechanical works during plant shutdowns. Operations and maintenance services.

Shareholder (10%) in Operating Agreement B-2X. 68/79, in conjunction with Nimir Petroleum and Cartera de Inversiones Venezolanas.

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18. Flag Instalaciones, S.A.

Representative: Ing. Fabio Lovrecich, Director

Address: Avenida 17 Los Haticos No. 4-45, vía a San Francisco, Maracaibo

Telefax Commercial Office: (0261) 7526472

Telephone (Operations and Administration): (0261) 7179161, 7180085

Fax: (0414) 9665276

E-Mail: flagcomercial@flaginstalaciones.com

Date of constitution: 12 January 1961

Capital: Bs. 12.250.000.000,00

Patrimony: Bs. 15.373.727.000,00

Sales: Bs. 27.592.501.000,00 (1999)

Activity: Construction of: water treating plants, pump stations, buildings, piles, electric systems, electric substations, grounding systems, bridges and viaducts. Operation and maintenance of drainage's and aqueducts water pump stations and water treating plants. Repair and maintenance of water treating plants, civil works in general. Land movement and demolitions. Cleaning of oil storage tanks. Sandblasting services. Coating of pipelines with polyethylene. Materials transport services.

19. H & M Ingenieros, C.A.

Representatives: Ing. Jesús Benjamín Henríquez González, Principal Director and Ing. Juan Carlos Martínez Urraca

Address: Avenida 33 con Carretera Williams, Sector Los Cilantrillos, Punta Gorda

Telephone: (0265) 4150350 (Master) (0416) 6608217, 6604822

Fax: (0265) 4150352 (0261) 7978509

E-Mail: gerencia@hymingenieros.com

E-Mail: jcmll@cantv.net

E-Mail: jeles@cantv.net

Web page: www.hymingenieros.com

Date of constitution: 25 November 1992

20. Ingeniería de Proyectos, Construcciones y Mediciones, C.A. (Inprocome)

Representative: Ing. Naim José Hómez García, President

Address: Calle 67-B No. 11-91 entre Avenidas 11 y 12, Sector Tierra Negra, Maracaibo

Shop and Store: Barrio San Ramón, Calle 21 No. 8A-26, Municipio San Francisco

Telephone: (0261) 7970417, 7973657, 7977185

Telephone Shop and Store: (0261) 7170535, 7180569

Fax: (061) 7988930, 7422168

E-Mail: inprocome@cantv.net

Date of constitution: 09 April 1976

Capital: Bs. 1.500.000.000,00

Patrimony: Bs. 4.670.787.103,00

Sales: Bs. 3.039.889.123,00 (2003)

Employees: 35

ISO Certification: INTEVEP

Activity: Planning and execution of civil works, road service, city planning, hydraulic and electric works, land movements, execution of metalmechanic works, handling of dangerous residues, equipment rentals, deforestation, weeding, pruning and reforestation of gardens, mayor civil works, construction of pumping stations, injection and compression, construction of air conditioning ducts, construction of storage tanks, welding services and installation of refractors.

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21. Interlago Transport, C.A.

Representative: Sr. Roberto García Muchacho, Managing Director
Address: Avenida Intercomunal, Sector Tamare, entrando por BJ Services hacia La Playa, Ciudad Ojeda
Address: Avenida 2 El Milagro, Edificio Ven-Mex, Planta Alta, frente a la Cámara de Comercio, Maracaibo
Telephone: (0265) 6627323, 6312050 (0261) 7915397, 7917652
Fax: (0265) 6621404 (0261) 7914944
E-Mail: roberto@interlago.com
Web page: www.interlago.com
Date of constitution: 01 July 1953
Capital: Bs. 600.000.000,00
Patrimony: Bs. 1.215.790.874,00
Sales: Bs. 5.504.787.931,00 (2000)
Activity: Contractor for works and maintenance for the oil industry. Renting of equipment's and heavy machinery.

22. MMR Venezuela, S.A. (MMR)

Filial of MMR Radon Constructors, Inc.
Representative: Ing. Arturo Pinzón, General Manager
Address: Avenida 3F entre Calles 71 y 72 No. 71-30, Edificio Residencias San José, Local No. 2, Primer Piso, Maracaibo
Telephone: (0261) 7925809, 7921025
Fax: (0261) 7926243
E-Mail: apinzon@mmrvzl.com
E-Mail: jcarnevali@mmrvzl.com
Web page: www.mmrvzl.com
Date of constitution: 27 December 1993
Capital: Bs. 750.000.000,00
Patrimony: Bs. 5.557.429.329,30
Sales: Bs. 9.775.360.400,05 (2003)
Employees: 100
Activity: Instrumentation services: Installation and supply of air; equipping of control rooms, installation of instruments. Electric services: controls, adjustment of electrical equipment, and grounding and special systems. Technical services: Calibration, designs, high voltage tests, systems analysis. Projects management: Projects managers, superintendents, controllers, planners, managers of quality assurance and quality controls (QA/QC), inspectors, Safety managers, field supervisors.

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23. Muelles y Servicios, S.A.

Representative: Sra. Yazmín Moronta, Administration Manager
Address: Calle Independencia, Sector La Playa, Ciudad Ojeda
Telephone: (0265) 6625255, 6622442
Fax: (0265) 6621854
E-Mail: muellesyservicios@hotmail.com
Capital: Bs. 480.000.000,00
Patrimony: Bs. 1.514.115.463,00
Sales: Bs. 853.216.304,00 (1999)

24. Onica, S.A.

Representative: Sr. Waldo E. Ordoñez Matheus, Administrative Director
Address: Autopista No. 1 No. 500-125, Sector Los Pinos, Maracaibo
Telephone: (0261) 7341486, 7341586, 7340086, 7341573
Fax: (0261) 7379105
E-Mail: onica@telcel.net.ve
Date of constitution: 10 October 1973
Capital: Bs. 700.000.000,00
Patrimony: Bs. 23.515.812.241,00
Sales: Bs. 6.743.996.769,00 (2003)
Activity: Contractor for city planning and landscaping works. City planning maintenance. Construction of walls and screens. Land movements and demolitions. Maintenance of aqueducts, sewers and drainages. Construction of metallic structures.
Supplier of asphalt and paving materials.

25. Petrolago, C.A.

Representatives: Sr. Carlos Pérez, Vice-president
Dr. Edgar Romero Nava, President
Address: Sector La Ensenada, Municipio La Cañada de Urdaneta, al sur de Maracaibo
Offices in: Caracas, Distrito Capital
Telephone: (0262) 2548161, 2548167, 5150060, 5150061
Fax: (0262) 2548163
E-Mail: cperez@petrolago.com
Date of constitution: September 1981
Capital: Bs. 7.871.493.000,00
Patrimony: Bs. 15.122.782.377,00
Sales: Bs. 30.666.397.668,00 (2002)
Employees: 373
ISO Certification: INTEVEP
Activity: Contractor for construction and maintenance of marine, land and modular works.

26. Raymond de Venezuela, C.A. (Rayven)

Representative: Sr. Gustavo Romero, General Manager and Director
Address (Headquarters): Avenida 17 esquina Calle 77 (5 de Julio), Edificio San Luis, Planta Baja, Local 4, Maracaibo
Telephone: (0261) 7831736, 7831780, 7590725, 7833552
Fax: (0261) 7517337

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Address (Yard): Concretos Industriales, C.A. (CONINCA), San José de Potreritos, Municipio La Cañada de Urdaneta
Mobile: (0414) 3621493, 3606270
Fax: (0414) 6535073

E-Mail: raymond04@cantv.net

Web Page: www.raymonddevenezuela.com

Date of constitution: 19 June 1957

Capital: Bs. 700.045.000,00

Patrimony: Bs. 2.909.098.344,00

Sales: Bs. 7.496.144.376,00 (1999)

Employees: 45

ISO Certification: INTEVEP

Exports: Trinidad, Ecuador and Honduras.

Activity: Construction of jetties, drilling platforms, varied marine structures, and general engineering installations.

Supplier of prefab products and pipes.

27. Sampieri y Fortunato, S.A. (Samfor)

Representative: Sr. Franco Sampieri, 2nd. Vice-president

Address (Headquarters): Calle 74 con Av. 12, Centro Comercial Aventura, Local 47, Maracaibo

Address (Operations): Calle 164 entre Avenidas 68 y 70, II Etapa Zona Industrial, Maracaibo

Offices in: Cabimas

Telephone (Headquarters): (0261) 7971115, 7981197

Telephone (Operations): (0261) 7361967, 7360367, 7362259

Fax Headquarters: (0261) 7988380

Fax Operations: (0261) 7363078, 7983387

E-Mail: fsampieri@samfor.com

Web page: www.samfor.com

Date of constitution: 20 October 1966

Capital: Bs. 2.000.000.000,00

Patrimony: Bs. 12.243.830.761,00

Sales: Bs. 12.524.966.578,00 (2003)

Employees: 35

Activity: Civil, mechanic, electric and instruments constructions. Specialists in land movement and road services. Integral handling of drilling residues.

28. Sea Tech de Venezuela, C.A.

Representatives: Sr. José Ramón Muchacho Rothaug, Finance Director

Sr. Francisco Domingo Sarri, Operations Director

Sr. Robert Sunyovsky Batista, Technical Director

Address (Operations): Avenida Intercomunal, Sector Las Morochas, Edificio Gee-Mee Supply, Local No. 56, Ciudad Ojeda

Address (Administration): Calle 71 con Avenida 15-A No. 70-89, sede de Suseguro, C.A., Maracaibo

Telephone Ciudad Ojeda: (0265) 6310595, 6314033

Telephone Maracaibo: (0261) 7525749

Fax Ciudad Ojeda: (0265) 6314881

Fax Maracaibo: (0261) 7591398

E-Mail: robert.s@seatech.com.ve

E-Mail: domingo.f@seatech.com.ve

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Date of constitution: 12 December 1996

Capital: Bs. 600.000.000,00

Patrimony: Bs. 2.004.685.796,00

Sales: Bs. 7.360.692.740,00 (2003)

Activity: Contractor for marine and submarine works and maintenance. General works and maintenance for oil industry. Cathodic protection systems. Divers services. Geodesic services by satellite.

29. Servicios Dabajuro, S.A. (Serdab)

Representative: Sr. Guillermo Antonio Reyes Zabala, President

Address: Carretera a Paujizal Km. 114, Dabajuro, Estado Falcón

Telephone: (0279) 8281471, 8281041

Fax: (0279) 8281041

Address: Avenida 42 entre Carreteras N y O, al lado del Colegio Los Samanes, Ciudad Ojeda

Telefax: (0265) 6621621

E-Mail: serviciodabajuro@cantv.net

Date of constitution: 22 June 1973

Capital: Bs. 400.000.000,00

Patrimony: Bs. 11.525.369.584,34

Sales: Bs. 7.390.907.609,06 (2003)

Employees: 09

Activity: General construction and maintenance works, especially for oil and gas lines. Road service and oil wells locations. Loading and offloading of materials. Transport of residual waters from hydrocarbon activities, toxic residues, towing services, land movements, construction and repair of roads,

hydrocarbon recovery, handling and cleaning of oil pits, treatment of residues by bioremediation methods, control and combat of oil spillage's, cleaning oil tanks by biological methods. Construction of electric works, metalmechanics, general painting. Integral handling of vegetation, control of weed killers, trees pruning, arborization. General welding.

30. Taller Las Palmas, C.A. (Talapa)

Grupo Las Palmas

Representatives: Sra. Yajaira Albornoz, Administration Manager

Sr. Guido Casucci, General Manager

Address: Carretera vía a La Plata, a 800 Mts. de la Avenida Intercomunal, Punta Gorda

Offices in: Anaco Estado Anzoátegui

Telephone: (0264) 2999371, 2999980, 2999481

Fax: (0264) 2999383

E-Mail: talapa@iamnet.com

E-Mail: talapaadm@iamnet.com

Date of Constitution: 06 February 1970

Capital: Bs. 5.000.000.000,00

Patrimony: Bs. 16.936.240.005,74

Sales: Bs. 20.875.829.797,31 (2003)

Activity: Contractor of construction and maintenance of civil and metalmechanic installations. Metallic structures and sheds.

Supplier of metallic closets, steel flanges, metallic doors and windows, steel laminated products, storage tanks and metallic furniture.

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31. Técnicos Especialistas, C.A. (TECNESP)

Representative: Sr. José Luis Oquendo, President

Address: Avenida Intercomunal, Sector El Martillito, Centro Comercial El Carmen, Local No. 7, Cabimas

Telephone: (0264) 3714954

Fax: (0264) 3714218

E-Mail: tecnesp@cantv.net

Date of Constitution: 21 November 1996

Capital: Bs. 150.000.000,00

Patrimony: Bs. 936.616.704,17

Sales: Bs. 3.678.816.764,64 (2004)

Employees: 12

Activity: Construction, remodelling and maintenance of thermal, acoustic and antivibration insulation's. Construction, remodelling and maintenance of residual water collecting systems. Construction and remodelling of electric and instruments works. Construction of typical oil producing and refining plants. Services to restore areas affected by oil spillage's.

32. Venezuelan Netherland Field Contractors, S.A. (VENEFCO)

Representatives: Ing. Javier Linares Peña, Administration and Finance Director
Sr. Ricardo Linares Gori, President

Address: Calle Junín, antiguo Campo Venteca, frente a Ivalvenca, Punta Gorda Municipio Cabimas

Offices in Puerto Ordaz, Coro and Maturín.

Telephone: (0264) 2999783, 2999721, 2999071, 2999082, 2999084

Fax: (0264) 2999013, 2999792

E-Mail: jlinares@venefco.com

E-Mail: warellano@venefco.com

Web page: www.venefco.com

Date of constitution: 17 June 1982

Capital: Bs. 3.000.000.000,00

Patrimony: Bs. 12.289.839.287,00

Sales: Bs. 15.419.517.903,00 (2003)

Employees: 37

ISO Certification: INTEVEP

Activity: Fabrication, erection and start up of new equipment's and installations. Maintenance services of all different components of oil and gas related activities. Laying of various oil, gas and fireprotection lines. Application of internal and external coating tom pipes, pressure vessels, storage tanks, etc. Repair of various floating vessels.

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33. Venezolana de Inversiones y Construcciones Clérico, C.A. (VINCCLER) (Zulia Branch)

Representative: Ing. Paul Steiner Levine, Works Director
Address: Avenida 2-A No. 72-A-57, Sector La Virginia, Maracaibo

Telephone: (0261) 7920404

Fax: (0261) 7923079

E-Mail: psl@vinccler.com

E-Mail: vinccler@cantv.net

Web page: www.vinccler.com

Date of constitution: 14 December 1956

Capital: Bs. 5.000.000.000,00

Patrimony: Bs. 65.537.672.000,00

Sales: Bs. 91.081.806.000,00 (2003)

Employees: 25

ISO Certification: INTEVEP

Activity: As a general contractor, VINCCLER, C.A. executes work of diverse nature. Its integral services embrace the following specialities:

Civil Works: Turnpikes, roads, bridges, tunnels, airports, ports, dams, treating plants, aqueducts, sewers, piles, silos, walls, metallic structures, industrial plants, refineries, industrial and institutional buildings, jetties, offshore structures, dredging.

Mechanical Works: Installation of equipment's, laying of oil, gas lines, pump stations, power generation plants, storage systems.

Electric Works: Substations and transmission lines, industrial electricity.

Operator: Of the Falcon Este Operating Agreement at Cumarebo, Falcon State.
Production: 300 barrels per day.

34. Zaramella & Paván Construction Company, C.A. (Z&P) (Zulia Branch)

Representatives: Ing. Roberto J. Pino, Operations Manager
Sr. Piero Luigi Giuriolo, President

Ing. Mirco Fusaro Fabri, Vice-president

Ing. Ricardo Pino, Director

Ing. Máximo Guiriolo, Director

Address: Calle Independencia, Sector La Playa, Las Morochas, Ciudad Ojeda

Address: Avenida 16-A esquina Calle 71, Maracaibo

Offices in: Caracas

Telephone: (0265) 6316322 (master), 3319011, 6319133, 6319411, 6319875,
6319105, 6319311, 6319522

(0261) 7833324, 7835517, 7834433

Fax: (0265) 6319482, 6317703, 6319604, 6318942

(0261) 7513806

E-Mail: clientes@zandp.com

E-Mail: mfusaro@zandp.com

E-Mail: robertopino@zandp.com

Web page: www.zandp.com

Date of constitution: 15 March 1951

Capital: Bs. 15.000.000.000,00

Patrimony: Bs. 48.169.419.504,00

Sales: Bs. 161.973.930.407,00 (2003)

Employees: 1.124

Certifications: ISO 9002 FONDONORMA / INTEVEP

Activity: Construction and erection both on and offshore of plants such as, gas

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plants, water injection plants, petrochemical plants, flow. Modules. Laying of oil and gas lines (up to 40 inches diameter). Anticorrosion coating to pipes subject to high temperatures.

35. Zulia Industrial Constructions, C.A. (ZIC)
Member of Grupo Moschella

Representatives: Sr. Carmello Moschella Carnabucci, Director and President
Sr. Alexandro Moschella C., President Substitute

Address: Carretera N entre Avenidas 41 y 42, Zona Industrial, Ciudad Ojeda
Address: Avenida 5 de Julio esquina Avenida 17, Edificio San Luis, Piso 3,
Maracaibo

Offices in: Puerto La Cruz

Telephone: (0265) 6626777, 6629987
(0261) 7835340, 7592276, 7590626, 7591350, 7591107,
Fax: (0265) 6626777 (0261) 7591614, 7590775

E-Mail: estimaciones@zicmbo.com

E-Mail: administracion@zicmbo.com

Web page: www.zicmbo.com

Date of constitution: 04 January 1973

Capital: Bs. 3.620.360.000,00

Patrimony: Bs. 12.217.165.644,00

Sales: Bs. 10.794.960.563,00 (2003)

Employees: 50

ISO Certification: INTEVEP

Activity: Construction, installation and maintenance of all major oil and gas related plants and activities.

Engineering and Consultants

36. Asesores Técnicos Corporativos, S.A. (ATEC)
(Zulia Branch)

Representative: Ing. Edwin Bermúdez, General Manager

Address: Avenida 4 Bella Vista, Edificio Caracas, Piso 3, Maracaibo

Telephone: (0261) 7932100, 7934781

Fax: (0261) 7932700

E-Mail: ebermudez@atecsa.com.ve

Web page: www.atecsa.com.ve

Date of constitution: 19 October 1995

Capital: Bs. 488.000.000,00

Patrimony: Bs. 873.383.235,00

Sales: Bs. 90.754.791,00 (2003)

Employees: 38

Activity: Engineering services in relation with plant maintenance, operations, shutdowns and various specialised services. Technical representations.
Supply of personnel.

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37. Consultores Occidentales, S.A. (COSA)

Representatives: Ing. Carlos Arrieta P., National Marketing Manager

Ing. Edgar Arrieta, President

Address: Avenida 5 de Julio entre Avenidas 13A y 14, Centro Comercial Olímpico, Planta Alta, Maracaibo

Telephone: (0261) 7973233, 7975344, 7974918, 7971447, 7971477, 7973229, 7971423, 7973606, 7973113

Fax: (0261) 7971874, 7975615

E-Mail: clarrieta@cosa.com.ve

Date of constitution: 12 August 1971

Capital: Bs. 8.500.000.000,00

Patrimony: Bs. 11.371.447.095,00

Sales: Bs. 2.339.168.417,00

Employees: 200

ISO Certification: FONDONORMA

Activity:

Consultancy in process, civil, mechanical, industrial, electric, instruments and control, architecture engineering. Projects of complex nature and multidisciplinary requirements. Construction in land and offshore directly executed by Cosa:

- Laying of oil and gas lines
- Refineries constructions and Plants shutdowns
- Pumping stations
- Compressing plants
- Water and Gas Injection Plants
- Industrial Plants and Offices

- Infrastructure works
- Marine services (Laying and repair of lines)
- Residues treatment plants
- Oil and gas facilities
- Flow stations
- Prefab modules
- Construction of jetties.

Major Maintenance via affiliated company Koch Glitsch Pantech.

Maintenance, inspection, repair and installation of equipment such as:

- Fractionating towers and its internals
- Tanks, reactors and heat exchangers drums
- Furnaces, boilers, and burners
- Hydraulic extraction of tubular bundles
- Loading and offloading of catalyses
- Non destructive tests
- Chemical cleaning
- Scaffolding

Environmental impact studies, environmental engineering, evaluation of environmental projects.

Operator of the Operating Agreement Casma Anaco together with Cartera de Inversiones Venezolanas and Phoenix International, as from July 1997.

Production: 1.550 barrels per day.

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38. Coplan, C.A.

Representative: Ing. Roberto Gil Gerbino, President
Address: Avenida 4 Bella Vista con Calle 70, Edificio Lisa María, Tercer Piso, Oficina 9, Maracaibo
Telephone: (0261) 7981568, 7981213
Fax: (0261) 7979047
E-Mail: roberto.gil@coplan.com.ve
Web page: www.coplan.com.ve
Date of constitution: 21 September 1989
Capital: Bs. 140.000.000,00
Patrimony: Bs. 342.929.692,00
Sales: Bs. 349.268.094,00 (2003)
Employees: 20
Activity: General engineering and consultancy as well as EPC's activities. Also project management.

39. Estudios y Proyectos Ditech, S.A. (antes Dit Harris, S.A.) (Zulia Branch)

Representative: Ing. Ángela Musacchia, Regional Co-ordinator
Address: Calle 76 entre Avenidas 13 y 13-A, Centro Comercial Los Niveles, Local C-3, Maracaibo
Offices in: Caracas, Maturín, Anaco, Puerto La Cruz, San Tomé y Punto Fijo.
Telephone: (0261) 7977436
Fax: (0261) 7972976
E-Mail: amusacchia@dit-harris.com

Date of constitution: 08 March 1972
Capital: Bs. 1.700.000.000,00
Patrimony: Bs. 12.847.649.760,00
Sales: Bs. 12.690.948.561,00 (2003)
Employees: 296
Activity: Engineering, procurement and construction.

40. Inelectra, S.A.C.A. (Zulia Branch)

Representative: Ing. Oscar Montiel, Regional Manager
Address: Avenida 11 con Calle 78 Dr. Portillo, Edificio Centro Electrónico de Idiomas, Pisos 4 y 5, Maracaibo
Telephone: (0261) 7980735, 7979045, 7978986, 7983745, 7982887, 7973560, 7988097, 7987782
Fax: (0261) 7988826
E-Mail: oscar.montiel@inelectra.com
E-Mail: delly.fernandez.de.rincon@inelectra.com
Web page: www.inelectra.com
Date of constitution: 08 November 1968
Capital: Bs. 20.938.973.600,00
Patrimony: Bs. 168.859.000.000,00
Sales: Bs. 281.208.000.000,00 (2003)
Activity: Engineering and consultancy, EPC activity, supply of personnel. Operator of Operating Agreements Kaki and Maulpa in partnership with Arco and Polar, via our affiliated Inemaka.

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41. Jantesa, S.A. (Grupo Jansa) (Zulia Branch)

Representatives: Ing. Ramón Guédez, Manager
Ing. Alberto Gotera, Promotion and Marketing Manager
Address: Avenida 4 Bella Vista con Calle Falcón, Edificio Federal Plaza, Piso 1, Oficinas 101-102-103-104-105-106-107, Maracaibo
Telephone: (0261) 7930640, 7931024, 7930522, 7930892, 7932663
Fax: (0261) 7933433, 7927818
E-Mail: ramon.guedez@jantesa.com.ve
E-Mail: alberto.gotera@jantesa.com.ve
Web page: www.jantesa.com
Date of constitution: 22 January 1973
Capital: Bs. 2.570.000.000,00
Patrimony: Bs. 47.145.212.081,00
Sales: Bs. 38.877.809.468,00 (2003)
Employees: 1.100 (at national level)
ISO Certification: FONDONORMA/INTEVEP/IQNET
Activity: General Engineering, Consultancy and EPC activities for all types of industries.

42. Mannucci y Rondón Consultores, C.A. (MANNYRON)

Representative: Sra. Iraida Rondón de Barrientos, President
Address: Avenida 3F esquina Calle 84 (Carretera Unión), Edificio Secretariat, Piso 1, No. 1-7, Maracaibo.
Telephone: (0261) 7917953 (0416) 6606503 (0414) 6122531
Fax: (0261) 7926364
E-Mail: mannyron@cantv.net

Web page: www.mannyron.com.ve

Date of constitution: 12 July 1995

Capital: Bs. 50.000.000,00

Sales: Bs. 156.961.413,05 (2003)

Employees: 10

Activity: Petroleum Engineering Services. Geology, Geochemical and Geophysics projects. Supply of personnel.

43. N&V Consultores, C.A. (N&V, C.A.)

Representative: Ing. Enrique Alberto Novoa Romero, Promotion and Development Director.
Main Address: Calle 71 con Avenida 16 No. 16-33 / 16-59, Edificio N&V, Sector Paraíso, Maracaibo.
Operations Address: Avenida 25 No. 112-46, Haticos por arriba, Sector Cerro Pelao, Maracaibo
Offices in: Maturín, Estado Monagas
Telephone: (0261) 7591711 (master)
Fax: (0261) 7831380, 7591711 ext. 226
E-Mail: nvca@nvca.com.ve
E-Mail: enovoar@nvca.com.ve
E-Mail: jgonzalezs@nvca.com.ve
E-Mail: zlopesu@nvca.com.ve
E-Mail: dagonzalezs@nvca.com.ve
Web Page: www.nvca.com.ve
Date of Constitution: 09 June 1988
Capital: Bs. 1.002.000.000,00

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Patrimony: Bs. 3.797.162.030,00
Sales: Bs. 12.245.430.378,00 (2003)
Employees: 45

Activity: Conceptual, basic and detailed engineering. Focused on Electric Projects.

44. PCI Ingenieros Consultores, S.A. (Zulia Branch)

Representative: Ing. Ennys Amaya Isea, President
Address: Calle 74 entre Avenidas 14-A y 15 (Delicias), No. 14-A-26, Maracaibo
Telephone: (0261) 7970636, 7984459, 7984310
Fax: (0261) 7984310
E-Mail: pcimararacaibo@pciingenieros.com
Web page: www.pciingenieros.com
Date of constitution: 23 November 1990
Capital: Bs. 300.000.000,00
Patrimony: Bs. 4.784.138.692,00
Sales: Bs. 5.355.328.719,00 (2003)
Employees: 11

Activity: Covers the whole engineering concepts with a focus on instrumentation and electricity. From conceptual to delivery of facility to owners.

45. Proyecta Corp., S.A. (Zulia Branch)

Representative: Arq. Maritza Labrador, Manager Western Region
Address: Avenida 3E entre Calles 78 y 79, Torre Empresarial Claret, Piso 12, Oficina 2, Maracaibo
Offices in: Caracas, Puerto La Cruz, Anaco, San Tomé and Maturín
Telephone: (0261) 7933094
Fax: (0261) 7932827

E-Mail: mlabrador@proyecta.com.ve

Web page: www.proyecta.com.ve

Date of constitution: 03 May 1968

Capital: Bs. 2.200.000.000,00

Patrimony: Bs. 9.246.441.430,00

Sales: Bs. 15.466.505.787,00 (2003)

Employees: Not available

Activity: Engineering services; IPC projects; operation; maintenance; inspection of works and installations for the gas, oil, petrochemical and energy sectors.

46. Tecnoconsult, S.A. (Zulia Branch)

Representatives: Ing. Víctor Sztayzel, Regional Manager
Lic. Jesús Ramírez, Administration and Finance Manager
Address: Calle 73 con Avenida 22 (esquina Avenida 5 de Julio), Torre BHV, Piso 8, Maracaibo
Telephone: (0261) 7526252, 7830225
Fax: (0261) 7526252

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E-Mail: jramirez@tecnoconsult.com

Web page: www.tecnoconsult.com

Date of constitution: 28 June 1979

Capital: Bs. 7.197.913.000,00

Patrimony: Bs. 17.912.854.513,00

Sales: Bs. 99.116.129.243,00 (2003)

Employees: 95

ISO Certification: FONDONORMA/INTEVEP.

Activity: Engineering and Consultancy for Oil and Gas related projects plus all general industrial projects.

47. Tecser Ingeniería, C.A.

Representatives: Sr. Rafael del Moral N., President

Sr. Audio Avila García, Marketing Manager

Address: Avenida 4 Bella Vista con Calle 83, Edificio Caracas, Piso 2, Maracaibo

Telephone: (0261) 7930911, 7934018, 7930263, 7930771, 7934134, 7934198, 7934223, 7917846, 7911079

Fax: (0261) 7918308

E-Mail: rdelm@tecseringenieria.com

E-Mail: avilaa@tecseringenieria.com

Web page: www.tecseringenieria.com

Date of constitution: 02 September 1994

Capital: Bs. 1.000.000.000,00

Sales: Bs. 2.625.435.113,65 (1999)

Employees: 260

ISO Certification: INTEVEP

Activity: Integral services for projects and EPC contracts. Supply of personnel. Technical support.

48. Venezolana de Ingeniería de Consulta, S.A. (VENINCO)

Representative: Ing. Omar Larrazábal, Director

Address: Calle 93 (Avenida Padilla) No. 17C-105, Edificio Hanafi, Primer Piso, al lado del Edificio Miranda, Maracaibo

Telephone: (0261) 7231157, 7231406, 7232612, 7231571

Fax: (0261) 7232410

E-Mail: veninco@veninco.com

E-Mail: larrazabalo@veninco.com

Web page: www.veninco.com

Date of constitution: 04 May 1989

Capital: Bs. 1.200.000.000,00

Patrimony: Bs. 1.693.193.076,00

Sales: Bs. 4.518.462.408,00 (2002)

Employees: 16

ISO Certification: FONDONORMA (2001) / INTEVEP

Activity: Mostly supply of qualified personnel.

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**49. Venezolana de Proyectos Integrales, C.A. (VEPICA)
A Wood Group Company (Zulia Branch)**

Representative: Ing. Zoraida Urbina, Regional Manager

Address: Avenida 5 de Julio entre Avenidas 3-E y 3-F, Edificio Géminis,
Pisos 1 al 11, Maracaibo

Telephone: (0261) 7923318, 7921236, 7926747, 7927141

Fax: (0261) 7916293

E-Mail: zurbina@vepica.com

Web page: www.vepica.com

Date of constitution: 03 March 1972

Capital: Bs. 8.000.000.000,00

Patrimony: Bs. 40.500.764.000,00

Sales: Bs. 52.858.184.000,00 (2003)

Employees: 300

ISO Certification: FONDORNOMA/INTEVEP

Activity: EPC related to General Engineering. Information Technologies,
Environmental Engineering. Inspections, non-destructive, testing, QA/QC.
Operation and maintenance of oil installations.