



OECD Public Governance Reviews

# Public Procurement Review of Mexico's PEMEX

ADAPTING TO CHANGE IN THE OIL INDUSTRY

HIGHLIGHTS



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*Highlights*

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## INTRODUCTION

This booklet presents the highlights of the report *Public Procurement Review of Mexico's PEMEX: Adapting to change in the oil industry*. Since the 2013 Energy Reform, which opened up Mexico's energy sector to private investment, PEMEX has become a state productive enterprise with the core mission of creating value. This new legislative framework granted PEMEX greater autonomy for its administration, organisation, management and budget, as well as a new corporate structure. At the same time, it changed PEMEX's organisational structure and resulted in a series of reforms in different fields, including procurement.

## KEY FINDINGS

PEMEX senior procurement management now reports directly to the CEO, which indicates the strategic importance given to this activity, and the function is centralised into the Corporate Directorate for Procurement and Supply (DCPA), ensuring the development of homogeneous procurement processes throughout PEMEX and its subsidiaries, as well as the consistent application of the regulatory framework. Three strategic pillars were defined to allow the new procurement structure to create value: strategic supply and category management, procurement and supply model, and suppliers' management and development.

Overall the legal environment seems to be more conducive to leverage on public procurement for achieving secondary policy objectives. Developing a vision for sustainable green growth and to achieve social objectives and support the development of small and medium-sized enterprises, innovation, and standards for responsible business conduct would contribute to an approach that seeks such objectives without sacrificing the primary objective: creating value.

PEMEX has set up a comprehensive change management strategy identifying resistances and obstacles in order to deploy measures to minimise them. However, PEMEX still has to develop a professional procurement workforce to leverage procurement activities strategically.

The recent regulatory reforms led PEMEX to streamline the structure of solicitation documents and model contracts. The development of 13 new generic model contracts represents a significant investment in the clarification of the commercial and contractual relationship PEMEX wants with its major service providers. The generic model contracts are more accessible and reflect precisely the specificities of a larger range of requirements and circumstances. However, improvements can be made regarding intellectual property rights, termination rights, and dispute resolution.

PEMEX is developing a framework to prevent, identify, and sanction corrupt and unethical behaviours. In this sense, a sound internal control system has been established to ensure integrity, fraud, and corruption risks and threats are identified and effectively mitigated. In this framework, new measures on integrity have been introduced (i.e., new Code of Ethics and Code of Conduct, as well as specific provisions on conflicts of interest) while a robust Ethics and Corporate Integrity Programme (*Programa de Ética e Integridad Corporativa*) was launched in February 2016.

As PEMEX enters a more competitive market, it is taking action to identify good practices of supplier engagement, since excessive controls and a legalistic culture make it difficult to engage with suppliers for consultation purposes. During the review, suppliers expressed concerns about how selection criteria used in tenders are being applied. PEMEX could address such concerns by enhancing supplier relationships with new techniques, such as debriefing of suppliers or applying standstill periods.

## KEY RECOMMENDATIONS

Although several achievements have strengthened the PEMEX procurement function, challenges remain to allow the company to reach its new institutional mission of creating value.

Regarding the management of the procurement process, PEMEX should pay particular attention to enhancing overall competition by reducing the proportion of direct awards, aligning procurement and business strategies through the standardisation of information systems to produce more useful reports for decision makers, making procurement plans, reports and information communicated internally and externally more accessible, advancing the professionalisation of the procurement workforce, and developing an e-procurement tool supporting the whole cycle of procurement operations.

PEMEX also faces a number of challenges regarding accountability and transparency, and it is thus called upon to increase efforts to establish a zero-tolerance policy against corruption. First, PEMEX could ensure a comprehensive and effective integrity framework for staff working in procurement, but also for the Board of Directors. At the same time, PEMEX would benefit from strengthening its culture of integrity, instilling it among its employees and requiring it from all subjects entering into a commercial relationship with the company and its subsidiaries. Third, improvements are needed to detect wrongdoings and channels to report them. As for transparency, PEMEX may review the existing mechanisms to disclose information in order to make them easily accessible to the public, including through the use of open data. At the same time, PEMEX needs to seek the right balance between protecting sensitive commercial information and achieving the highest degree of transparency of its procurement activities.

PEMEX would benefit from ensuring that all components and functions of the internal control system are present throughout the company. It is critical that line managers and personnel are actively involved in the risk management exercise. The anti-fraud and anti-corruption policies have to be continuously monitored and adapted to prevent, detect, and respond to this type of threats.

Finally, regarding its relations with suppliers, PEMEX would greatly benefit from developing strategic relationships by reinforcing its outreach to the suppliers' communities and revising its assessment framework to increase competition and unlock innovation potential, completing the evaluation model of its procurement function, and defining key performance indicators.

## KEY 2016 ACHIEVEMENTS

During the time the OECD report was carried out, PEMEX and OECD identified the actions needed to address the recommendations. The DCPA team put together a control board with the OECD recommendations, the units responsible to address them, and a timeline. This process has already produced results, notably:

- The implementation of the E-procurement system for PEMEX (*Sistema Electrónico de Contrataciones de PEMEX*, SISCEP) to advance transparency and trust in tender procedures.
- A significant reduction of direct awards: From 81% of the resources devoted to procurement being executed through direct awards in 2015 to 23% in the period April-August 2016. Likewise, there was an increase of 40% in the average number of bidders in open tenders.
- An updated legal framework to make more efficient the procurement processes of PEMEX and its subsidiaries.
- Upgraded communication and engagement with suppliers and contractors for PEMEX to obtain the necessary feedback to identify opportunities for improvement in procurement procedures.
- Improved procurement planning by following up initiatives from planning through implementation.
- Implementation of strategic supply and category management by developing 17 families and 31 categories.

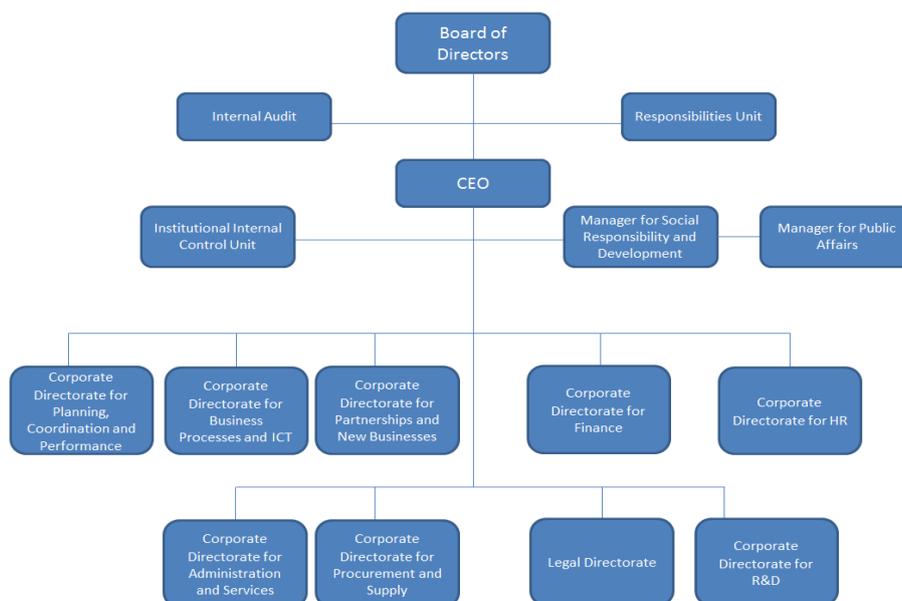
## I - IMPLEMENTING THE RIGHT FRAMEWORK IN PEMEX

### Chapter 1: Strengthening the structure and governance of PEMEX's procurement function

As a result of the new legal framework set out to transform PEMEX into a state productive enterprise able to compete in open international markets, PEMEX has a new organisational structure, corporate governance, a centralised procurement system, an internal audit function and a dedicated regime for procurement. All of these new features in place represent a major challenge for PEMEX senior and middle management as well as its staff.

- PEMEX's current structure and corporate governance, including its procurement function, is the result of the constitutional reforms and the approval of secondary laws in the energy sector and amendments to other legislations enacted by Mexico's government since December 2013. This reform, known as the "Energy Reform", transformed PEMEX into a state productive enterprise with legal personality, its own assets and more autonomy for its administration, organisation, management, budget and corporate structure.
- PEMEX's current organisational structure is set out in an Organic Statute enacted in 28 April 2015, which establishes that PEMEX is now led and managed by a Director General (CEO) and a Board of Directors. This reform also created the Corporate Directorate for Procurement and Supply (*Dirección Corporativa de Procura y Abastecimiento*, DCPA) whose title changed since June 2016 to Operative Directorate for Procurement and Supply (DOPA).

**Figure 1.1. PEMEX's basic organic structure**



Source: Manual de organización de estructura básica de Petróleos Mexicanos y Organismos Subsidiarios, April 2015.

- One of the most important changes of PEMEX's organisational structure consists in the establishment of 12 second level tiers directly dependent of the CEO, in addition to the Internal Audit function, which now reports directly to the Board. PEMEX's external audit remains in charge of external auditors and the Superior Audit Body (*Auditoría Superior de la Federación*, ASF) which is accountable to Congress.
- A second major change is in the composition of the Board, which now has 10 members, instead of 15, appointed by the Executive. Five of its 10 members are independent, appointed by the President and ratified by the Senate. The Board is chaired by the Minister of Energy and the Minister of Finance and Public Credit participates as well. Both ministers remain as Board members as long as they are not removed by the President and have alternates in their deputy ministers. The three other members of the Board, representing the federal government, as well as the five independent members, are appointed based on their experience, capacity and professional prestige. These independent members offer plurality of views, ensure Board's independence and provide expertise from outside of government.
- PEMEX's new business structure has also changed since November 2014 with the transformation of PEMEX Exploration and Production and PEMEX Industrial Transformation into productive state enterprises (EPS) with legal personality, their own assets, technical and operative autonomy but still subject to central coordination and direction of PEMEX. Five EPS were also created: PEMEX Drilling and Services, PEMEX Logistics, PEMEX Coproduction and Services, PEMEX Fertilizers, and PEMEX Ethylene.
- PEMEX's Board of Directors appoints its corporate directors on the proposals of the CEO, such as it is the case of the Director of DCPA, who reports directly to the CEO, reflecting the strategic importance given to the procurement function. PEMEX's Board is directly supported by at least four committees in the fulfilment of its new mission to create economic value and profitability. These committees are the *Audit Committee*, the *Human Resources and Remunerations Committee*, the *Strategy and Investments Committee* and the *Procurement, Leasing, Works and Services Committee* (CAAOS). This latter makes recommendations to the CEO on specific reforms and proposals to procurement policies and regulations to be approved by the Board, provides opinions upon Board's request on specific procurement procedures submitted, approves cases of exceptions to tender contracts of PEMEX or its EPS, reviews the Annual Programmes and acquisitions, leasing, works and services and makes recommendations to the Board, follows up on acquisitions, leasing, services and works authorised by the Board and carries out any other task determined by the Board. The Chair of CAAOS is one of the independent members of the Board.
- The corporate governance of PEMEX is still facing some challenges as its Board nomination procedures, given that PEMEX Law does not set out alternative merit-based procedures to appoint board members with the consequent risk of politicising the nominations.
- Since the reform PEMEX is not longer subject to the Law of Acquisitions, Leasing, and Services of the Public Sector (*Ley de Adquisiciones, Arrendamientos y Servicios del Sector Público*, LAASSP) and the Law of Public Works and Related Services (*Ley de Obras Públicas y Servicios Relacionados con las Mismas*, LOPSR) and has a new procurement legal framework applicable to PEMEX, its subsidiaries and affiliates. This framework includes rules and procedures set out in section 134 of the Mexican Constitution and the Free Trade Agreements (FTA) signed by Mexico, PEMEX Law and its Bylaws (*Reglamento*) and the normative instruments issued by the company itself.
- As part of the reforms, the Board of PEMEX issued regulatory instruments applicable to procurement activities, namely the *General rules for contracting*, the *General guidelines for procurement and supply*, and the *Policies and guidelines for procurement and supply*. The first set of rules establish the operative procedures for procurement and supply for PEMEX and its EPS, define the operational framework for procurement and supply pertaining planning, programming, budgeting, contracting and contract management.
- In the process of reforming its procurement function, PEMEX did an internal consultation with key clients of the DCPA but was no subject to the regulatory quality standards set out in the *Regulatory*

*Impact Assessment (RIA)*, nor a consultation period, as set out in the *Federal Law of Administrative Procedure*, as PEMEX is no longer part of the federal public administration.

- The DCPA carry out PEMEX's procurement activities and its Director General defines and steers the design and implementation of its national and international procurement strategy and business model. PEMEX Procurement International Inc (PPI) which also has legal status and its own assets and other several permanent committees and working groups are also institutions through which PEMEX carries out procurement activities.
- PEMEX has also implemented a methodology of strategic supply consisting in five steps from procurement planning to information and evaluation of procurement and supply processes and support management decisions. This new methodology aligns procurement activities with PEMEX's objectives and its subsidiaries' Business Plans.
- Procurement planning starts in 1 April of the year prior to the one in which purchases will take place, by compiling PEMEX's requirement. The Annual Programme for acquisitions, leasing, services, and works (PAAAOS) takes into consideration EPS' procurement needs and is issued no later than 15 November, with prior approval of the Corporate Directors of PEMEX and the Director General of the corresponding EPS and the Corporate Director of DCPA.
- PEMEX's procurement structure went from a decentralised to a centralised system that will allow PEMEX to develop a more homogeneous process, address the real business needs with quality and opportunity, take advantage and maximise its purchasing power, facilitate a comprehensive and long term procurement planning, manage procurement with focus on evaluation and continuous improvement, etc. This centralisation of the procurement function in the DCPA stemmed from an analysis of good procurement practices in 14 oil and gas companies around the world. This centralised procurement system is reflected in its *business plan* to create value in the transformation of PEMEX.
- Procurement information distributed outside PEMEX to suppliers and the public in general is done through several channels, such as DCPA microsite within the Internet portal which contains information, for example, on open public tenders, restricted invitation processes, and supplier relationships. Satisfying the requirements of the *General Law on Transparency and Freedom of Information (Ley General de Transparencia y Acceso a la Información Pública, LGTAIP)* PEMEX also uploaded procurement information in the Transparency Duties Portal (*Portal de Obligaciones de Transparencia, POT*), where all federal public entities actively publish information.

### ***Proposals for action:***

- While the corporate governance structure stemming from the Energy Reform aligns better with the OECD Guidelines, further reforms are needed to get closer to OECD best practice.
- Periodically review the regulatory framework for procurement to ensure that, while it gives PEMEX flexibility to compete in international markets, it also provides adequate safeguards for integrity.
- Ensure full commitment from PEMEX senior management with the reform and centralisation of the procurement function. In this sense, avoid long periods with acting corporate directors and deputy directors of DCPA.
- While at the central offices there seems to be awareness of the transformation process of PEMEX, advancing such transformation in the regional offices is a challenge and will require additional efforts to further employee engagement.

## Chapter 2. Implementing strong organisational procurement strategies

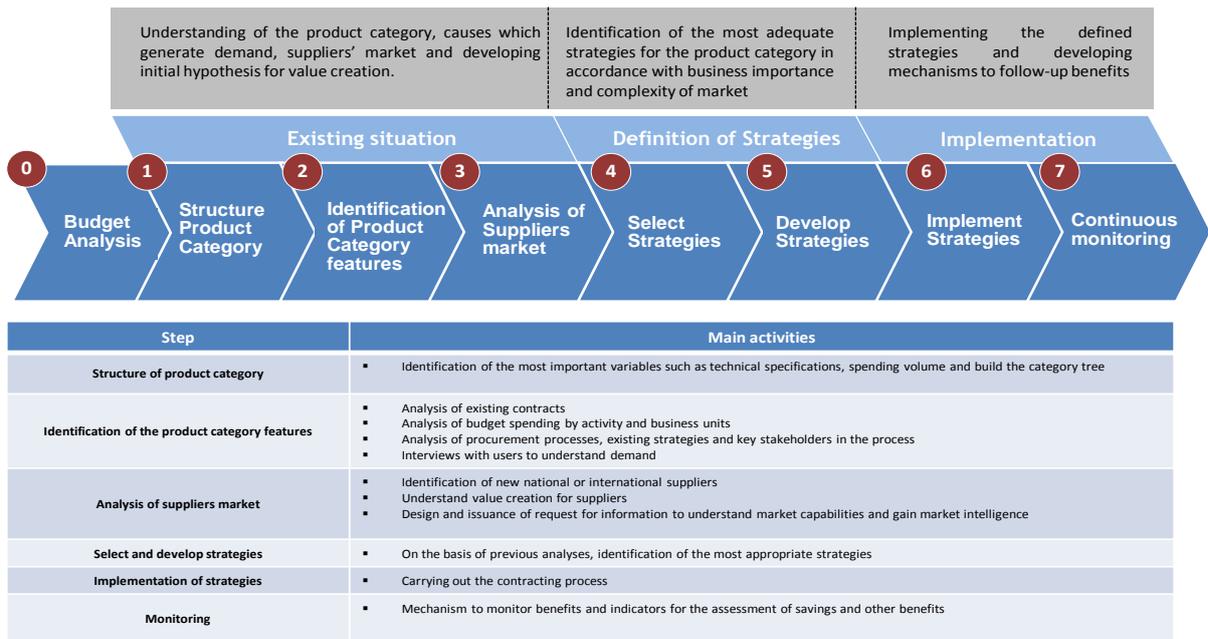
Under current economic circumstances, oil sector companies must generate savings and create value in their operating environment. In the particular case of PEMEX, returning 90% of its revenues to the Mexican government, this remains a strategic consideration when establishing its business objectives and procurement strategy.

- PEMEX centralized its procurement activities and defined a unified global procurement strategy in order to compete in a low price environment and meet overall government's objectives. PEMEX's strategic vision is detailed in its *business plan* issued on December 15, 2015. While for the first time PEMEX has integrated this Plan and corresponding strategies into its organisational environment, there is no Action Plan detailing timeframes for the completion of the various objectives and ensuring an effective monitoring of progress made towards these objectives.
- The centralisation of PEMEX procurement function upgraded its role in contributing to the definition and implementation of business strategies. The Committee for Acquisitions, Leases, Works and Services(CAAOS) oversees procurement strategies and is chaired by one of the four independent counsellors of PEMEX Board of Directors, thereby strengthening the links between business and procurement strategies. However, the Chair is designated for one year on a rotation basis, limiting long-term influence on corporate strategies.
- Changes on PEMEX's procurement strategies focus on better informed procurement decisions through profesionalisation of the procurement workforce, standardised processes, aggregation of needs under long-term partnerships and improved relations with suppliers. These efforts are expected to maximise value creation and streamline PEMEX operating procedures.
- PEMEX has developed product category management to implement tailored procurement strategies according to certain product families. This new methodology is known as "Strategic Supply and Management by Categories" ("*Abastecimiento estratégico y gestión por categorías*"), analyses PEMEX expenditure and then defines categories of products which can be subject to the same procurement strategy. The outcomes of this strategic assessment and the deriving contracts are after validated by an ad-hoc group called the Group for Strategic Supply (*Grupo de Abastecimiento Estratégico*, GAE). While PEMEX has centralized and standardised procurement processes there is still a room for improvement.
- PEMEX Procurement International (PPI), a US-based subsidiary of PEMEX carries out business on behalf of PEMEX through several agency agreements and aligns its operations to the strategies and standard operating procedures defined by the DCPA. PPI is specialised in different types of long term framework agreements (*Contratos Preparatorios, Acuerdos Referenciales*) and the corresponding procurement expenditures account for a large share of the entire PEMEX group. However, its procurement activities are not consolidated yet with those of PEMEX and its subsidiary productive companies and could not benefit from potential synergies.
- In an effort to implement transformational changes to PEMEX's procurement strategies, the DCPA developed a new procurement business model called Procurement 2.0 (Procura 2.0) to align procurement practices across business areas. It has also implemented a unified procurement strategy centred on processes, people and systems, and has developed an annual procurement plan designed by each entity in conjunction with the DCPA, subject to quarterly updates.
- PEMEX procurement plan lists 9 935 different processes to be carried out mostly during the year (with few multiannual projects) with an estimated budget of approximately 340 Billion MXN. The annual

procurement plan, however, does not include information of procurement forecasted operations of PEMEX subsidiaries. This fragmented information may hinder the access to procurement opportunities.

- The DCPA runs each specific procurement project together with a project manager who is a director of PEMEX or one of its subsidiaries appointed by PEMEX’s Director General to roll out the strategic sourcing method of procurement process. To base its procurement decisions, the DCPA should rely on strong and valid evidence that only an strong information capacity may provide and therefore PEMEX need to improve the knowledge of those participating in this process who needs to have a combined procurement and IT understanding.

**Figure 2.1 Strategic Sourcing methodology**



Source: Adapted from PEMEX.

- The DCPA relies on information from its 18 IT systems which collect and process procurement-related information covering the procurement cycle exposing PEMEX to risks on the quality and reliability of the information processed. In an effort to streamline the collection and analysis of procurement-related information, PEMEX recently initiated the development of a transitional platform supporting procurement operations, homologating processes, integrating documents and producing data used to inform future procurement decisions that will be implemented by the end of 2016 and will provide interfaces between the different systems.
- With the DCPA and the revisited procurement business model being recently established PEMEX will need to ensure value added resulting from the contracts awarded. The vast majority of PEMEX’s procurement operations have been carried out via direct award which hinders the provision of evidence demonstrating the value for money of the awarded proposals. Additional consolidation efforts are therefore needed to avoid repetitive small purchases and offer procurement opportunities for suppliers of all sizes. Transparency and consistency could also be strengthened in the decision to grant an exception to open public tender.
- Exceptions to an open tender are authorized by the Group for the Authorisation of Exceptions to an Open Public Tender (*Grupo de Autorización de la Excepción al Concurso Abierto*, GAECA). Yet, the submission of requests for exceptions is not structured so as to allow that essential information is consistently provided to substantiate the Group’s decisions.

- Considering the budget allocated to procurement, the DCPA is significantly participating to deliver the overall objectives of PEMEX and therefore, the outcomes of the public procurement processes shall be measured and assessed against these objectives. While the DCPA already developed a series of indicators to assess progress in the different procurement phases, these indicators focus on activities and not on performance and do not provide evidence of the efficiency of the procurement strategies. PEMEX should therefore set out clear objectives in terms of procurement based on key performance indicators (KPIs) to transform itself into an agile organisation able to adapt to changing environments and pursue evolving business strategies.

***Proposals for Action:***

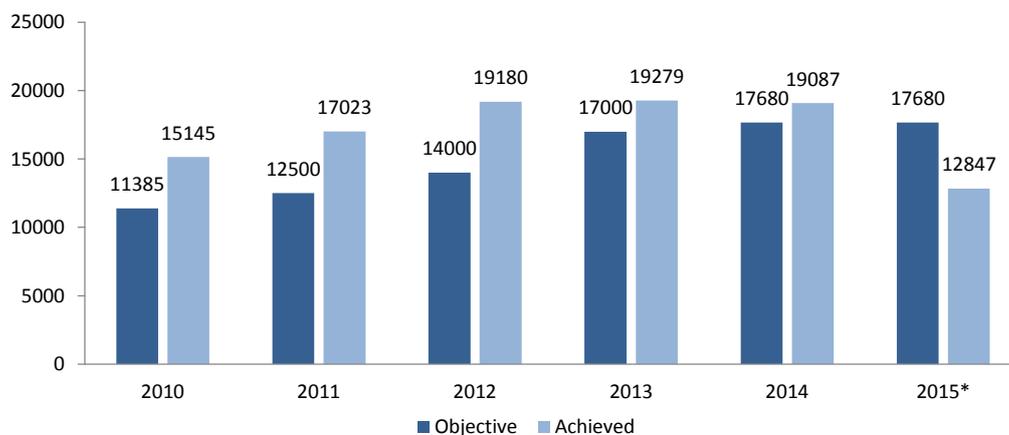
- Overall, the OECD highlighted that scarce resources coupled with increased competition with big oil companies requires that PEMEX procurement function become an agile organisation able to adapt to rapidly changing business priorities. For reaching these goals, PEMEX should develop a comprehensive procurement strategy detailing procurement objectives and processes to facilitate a common understanding across the group;
- To strengthen the role of the CAAOS in defining and implementing corporate strategies at the Board of Directors' level, PEMEX could consider supporting a change in the law to expand the duration of the term of office of its Chair.
- PEMEX should expand the consolidation strategies embedded in its new procurement model to all of its entities and notably to its subsidiaries to maximise volume leverage of its procurement activities and provide all suppliers with a streamlined framework.
- PEMEX should expand procurement opportunities information freely accessible on PEMEX website including procurement forecast of all entities of the PEMEX group, not only for its productive subsidiary companies, give such information in a standard to increase transparency and accessibility of procurement to all suppliers of all size and regions.
- PEMEX should implement IT system supporting the whole cycle of procurement operations to ensure consistency across entities and integration with other financial management systems and reduce as such procurement risks linked to data quality.
- PEMEX could enhance overall competition in its procurement processes by reducing the share, both in numbers and value, of direct awards.
- In cases where exceptions to public tender are considered to be the most appropriate strategic approach to the market, clear, evidence-based supporting documentation could be submitted to the GAECA in order to make informed decisions.
- The DCPA could develop, implement and monitor performance indicators beyond information on transactional activity.

### Chapter 3. Promoting complementary policy objectives through PEMEX's procurement

In Mexico, small and medium enterprises SMEs represent over 99% of formal enterprises and contribute to providing 34,7% of GDP and 7 out of 10 formal jobs in the country and are very significant to the labour market despite the limited access to capital and financing. However, the SMEs contribution to the overall GDP in Mexico has diminished in the last five years by a third and might have a negative impact in the progresses made to allow them to participate in procurement processes. The OECD countries agree that public procurement requires a balanced approach to pursue secondary policy objectives which varies depending each government and needs of its citizens. In this context, assessing how PEMEX has integrated in its procurement process initiatives to actively promote complementary policy objectives such as sustainable green growth, the development of small and medium-sized enterprises, innovation, standards for responsible business conduct or broader industrial policy objectives.

- In its efforts to develop local SMEs partly through participation in public procurement and promote their competitiveness, the Mexican Ministry of Economy established in 2009 a plan setting specific annual goals for each Federal entities and, from the beginning of this initiative, PEMEX was called to play a major role following the federal complementary policies established by the Ministry of Economy (Secretaría de Economía). PEMEX continues to participate in governmental programs on acquisitions to SME's such as *Programa de Compras de Gobierno* from the Ministry of Economy, which is automatically renewed each year, and commits to a certain annual goal of acquisitions from SME's and submit its results on a monthly basis. PEMEX is promoting a reassessment of this plan to reflect the changes of the oil and gas industry in Mexico.
- According to the results obtained from Mexican public sector entities, PEMEX accounts for approximately 20% of the total of the government procurement expenditures for SMEs in Mexico. For several years, PEMEX has surpassed the target set by the ministry of Finance, sometime by even nearly 80%, and one of its EPS, REF purchases the most from SMEs, followed by PEP and CORP. But since 2015, PEMEX did not achieve the federal goal for SMEs purchases because PEMEX's purchases are focused on specialized products and Mexican SMEs in general do not have the necessary skills and capital to deliver such products.

**Figure 3.1 SMEs objective set by the SE for PEMEX and the actual purchase achieved for the years 2010-2014 in millions of pesos**



\*Achieved as of November 2015

Source: Provided by PEMEX to the OECD Secretariat during a mission, 04-05 February 2016

- To achieve the proposed goal for domestic content, PEMEX developed in 2009 a supplier strategy, based on its 2008 law focusing on policies for national content and support to SMEs in the procurement process and sustainable development of suppliers and supply chains to strengthen the capacity of the domestic industry. PEMEX and NAFIN created in this context the Public Trust to Promote Development of National Suppliers and Contractors for the State Oil Industry to help SMEs to access funding but this public trust is not longer operating since 2014. A new trust has been established following the induction of a new legal framework and PEMEX and other companies competing with PEMEX can now on equal terms seek funding from this new fund.
- In addition to the specific annual goals set by the Ministry of Economy, the Government determined in its *Hydrocarbons law* that all operators in this sector conducting activities in Mexico, including PEMEX, should contribute to increase local content in exploration and extraction and established that a minimum average percentage of local content in exploration and extraction of hydrocarbons will gradually increase from 25% in 2015 to at least 35% in 2025. This new legislation also led to new programs like the *National Productivity Council*, the *Hydrocarbons Consultative Board* and the *new Fideicomiso*. These objectives will be reviewed every five years and this percentage will be different for deep and ultra-deep water activities, which will be set by the Ministry of Economy.
- Even though PEMEX has been one of the largest public entities in Mexico procuring from SMEs, the total amount represented only about 5% of PEMEX's total procurement in 2014. While it is not clear whether SMEs are to a large extent used as sub-contractors to larger corporations that are working for PEMEX. PEMEX should obtain detailed information from their contractors on the use of SMEs as subcontractors. However there is no data in this regard and therefore PEMEX does not have an overall picture of the amount of financial resources spent on SMEs and national content.
- Another important secondary policy that might be developed through procurement is the one related to green energy which needs to consider environmental externalities into the overall cost of the good or service to the community, and not just the financial cost to the procuring agency. PEMEX has not yet developed its own green procurement policy in support to its sustainable development efforts but has considered, however, jointly design a policy of that nature with its Environmental and Sustainability Committee based on the Energy Reform.
- Since 2012, PEMEX has the clear mandate to use natural resources following national and international green standards. Notwithstanding, no information or data available on this regard was found to assess whether PEMEX did comply with the requirements imposed by the Guidelines on acquisitions, leasing and services (*Políticas, Bases y Lineamientos en Materia de Adquisiciones, Arrendamientos e Servicios – POBALINES*) which is no longer in place
- To achieve a successful implementation of a green procurement policy, PEMEX needs to consider measurement and capacity building as well as whether or not there are indicators and information on contracts establishing environmental performance as the basis for bid evaluation. Moreover, procurement officers need to be provided with specific guidance on how to incorporate environmental considerations into their procurement activities. Thus, PEMEX could do more to institutionalise and conduct proactive capacity-building efforts.
- Health issues are also another important component of social objectives that could be promoted through procurement policy but PEMEX does not have yet its own social objectives related to health issues, neither data available on the number of contracts awarded to businesses employing for instance people with disabilities. This, even if the current procurement legal framework makes reference to providing preference in bidding proceedings to companies employing disabled person. Social objectives are inherent in LAASSP and therefore PEMEX could still aim applying the preference for disabled persons

provided by this legislation but it is certainly important that PEMEX develops its own social objectives that could be achieved through procurement.

- Overall, the review demonstrates that both PEMEX's approach on environmental or social objectives seems to be based on the social responsibility approach instead of achieving social and environmental objectives through public procurement. PEMEX is currently encouraging social responsibility where it can make improvements of social and environmental conditions, including labour and other human rights within communities.
- PEMEX has implemented labour and human right issues such in the case of PACMA which objective is "*Creating an investment program for the welfare and quality of life of those living in oil-producing areas,*" Under PACMA, selected suppliers must comply with minimum requirements and evaluation criteria that promote environmental protection but as well their contractors, its staff and its subcontractors. Such obligations are clearly defined at the early stages of the publication of tenders, they are not subject to assessment; however, failure to comply with those requirements can have consequences ranging from making deductions to payments or to termination of contracts.
- The PACMA reflects the strategy of top management of PEMEX that focus on competitiveness, transparency and as well as national development and conforms to the constitutional mandate. Its objective is a set of programs, works and / or actions, which contribute to obtain, expand and consolidate the social license to operate (LSO), allowing human development, generating productive capacities, addressing social gaps and forging a long-term sustainable development projects in the communities located within the areas of influence of PEMEX. Its technical committee of PEMEX personnel and outside stakeholders collegially decides which project to support.
- As for the efforts to design and promote complementary policies for public procurement, PEMEX needs to balance the benefits and potential costs of such policies as they can carry the risk of trading off integrity and value for money. By putting more emphasis on complementary criteria in tender evaluation the significance of value for money will be diminished. To disseminate what PEMEX is doing it organized workshops for the new registry and conferences about the new procurement model. An effort has been made in the electronic media also to update and make more transparent the information available for the public in general, mainly for the suppliers.
- Some measures on SMEs, green procurement and social objectives have been taken by PEMEX since the review of 2012. More projects on sustainable development are still required. Despite its commitment regarding SMEs, the economic environment does not seem favourable for SMEs as the falling price of oil will require PEMEX to be even more competitive leading to fewer SMEs being contracted.
- PEMEX has also adopted some initiatives to in some extend encourage innovation through procurement among others on restricted invitation or direct awarding as to ensure the best conditions of competitiveness for the company but these are not visible to its staff and the public.

### ***Proposals for action:***

- PEMEX could develop a strategy addressing the challenges that the company is now confronted to enhance SME competitiveness. To achieve this, PEMEX could be more proactive in gathering data on SMEs being subcontracted by primary contractors,
- PEMEX could set out incentives in regulations for the support of SMEs, national industry and disabled people, for example by benefiting primary contractors that are subcontracting to these industries.

- PEMEX could set up a framework for measuring results of the strategies/policies to use procurement to support socio-economic or environmental objectives. Part of this framework should include assessments of the extent to which public procurement is used in practice to support socio-economic or environmental objectives compared to other methods.
- PEMEX could support SMEs through a broad range of programmes. For example by designating specific products as competitive products; then only invite SMEs that directly manufacture such products to take part in competitive tenders.
- PEMEX could define a number of categories that allow for preferential purchasing of products with new technology. Products manufactured by newly developed technology would be evaluated and awarded certification, which allowed preferential purchasing.
- PEMEX could apply more forcefully various procurement mechanisms to promote complementary policy objectives, such as: proactively publishing yearly forecasts of contracts of interest for targeted companies (based on complementary policy objectives); setting aside lots specifically for target organisations (based on complementary objectives); developing systems that ensure prompt payment to small and medium-sized suppliers; reducing the value of performance bonds required to obtain a contract; and providing quality feedback to participants.
- PEMEX could support sustainable growth and promote innovation by developing a policy on green procurement to reduce the negative environmental impacts and environmental cost of public procurement.
- PEMEX could develop guidelines on how to better understand social impact procurement; to identify potential suppliers in Mexico and to develop a procurement process that assesses both financial and social value. This could help PEMEX achieve social objectives.

## Chapter 4. Enhancing procurement capabilities in PEMEX

PEMEX is one of the main sources of business for the private sector in Mexico. Its procurement workforce is responsible for taking stock of the company's assets and determining the external resources needed or might be needed in the future, facilitating access and management of such resources so that PEMEX can fulfil its strategic objectives. One of the major challenges for PEMEX is to find out a balance between taking efficient decisions to remain competitive within a negative oil price environment and making the appropriate decisions at the time of hiring, promoting or professionalising systematically the procurement workforce.

This Chapter focuses on the current PEMEX's workforce organisation, analyses its ability to fulfil the responsibilities required to achieve the best outcomes for the company and explains how by strengthening the strategic governance of its procurement workforce, PEMEX could be more efficient and transparent, while ensuring its continued performance.

- PEMEX workforce is composed of employees divided in two categories: the unionised workers that represent 83.9% of its personnel and the freely appointed (or *de confianza*) which represent the other 16.1%. The first group is composed of technical and administrative personnel with relative stable status and the second one of those who are part of the middle-management and professional staff and can be removed or transferred based on PEMEX needs or when new superiors are appointed. A third group is composed of short-term employees and consultants.

**Figure 4.1.-PEMEX's employees by subsidiary and types (as of May 2016)**

<i>Subsidiary</i>	<i>Confianza</i>	<i>%</i>	<i>Unionised</i>	<i>%</i>	<i>Total</i>
Exploration and production	10 482	19	44 603	81	55 085
Refining	5 197	9.5	49 501	90.5	54 698
PEMEX Corporate	8 414	25.9	24 101	74.1	32 515
Gas and basic petrochemicals	1 883	13.5	12 105	86.5	13 988
Petrochemicals	1 300	9.8	11 936	90.2	13 236
Industrial transformation	46	100	0	0	46
Logistics	25	100	0	0	25
Co-generation and services	22	100	0	0	22
Drilling	15	100	0	0	15
Ethylene	4	100	0	0	4
Fertilizers	4	100	0	0	4
<b>TOTAL</b>	<b>27 392</b>	<b>16.1</b>	<b>142 246</b>	<b>83.9</b>	<b>169 638</b>

*Source: Information provided by PEMEX*

- The DCPA has currently a total of 1737 employees. A total of 766 employees, including middle and senior management, are *confianza employees* and the other 971 are unionised employees who execute procurement functions exclusively. Procurement managers are categorised as managers for category of exploration and production and those for categories for industrial transformation and support and health.
- PEMEX regional offices perform procurement activities for the geographic area under their responsibilities and based on their procurement requirements through a model called Attention Center for Procurement and Supply (CAPAS).

- Human Resource Management in PEMEX is regulated by the *Federal Labour Law (Ley General del Trabajo)*, PEMEX Law and other PEMEX's specific regulations such as its organic statute, its organisational manual, the collective agreement between PEMEX and the Union of Oil Workers and the Working Bylaws for *confianza* employees. Since PEMEX is not longer a government agency the professional civil service law is not longer applicable.
- To recruit its personnel, PEMEX follows an institucional model subject to competitive rules, generally used for key position starting in the middle management ranks. Job seeking opportunities are advertised in PEMEX's website (*Bolsa de Trabajo*). Employee development plans (*planes de carrera*) are established between the corresponding functional areas and the individual employees, on the basis of the skills needed to fulfil business objectives. PEMEX also uses a retention mechanism for key positions identified by the corporate directorates in cooperation with the human resources management department.
- PEMEX has no standardised competitive processes for recruiting for key positions, starting in the middle management, and there is still a high degree of discretion from the office where the vacancy is. The margin for external applicants to fill vacancies is limited to instances where highly specialised skills are not found in the company's workforce, as internal candidates are given preference. PEMEX has no systematic robust practices to ensure transparency and merit-based selection, such as competitive processes and selection panels.
- PEMEX human resources policies offer few incentives to retain personnel. Even so, it is hard to replace staff given the specialised knowledge and experience required to fulfil their duties. Vacancies reserved for unionised workers are filled upon suggestions by the union as set out in the *Collective Agreement*. In these cases, managers are not therefore able to plan human resources recruitment based on competencies and skills. This rigid policy does not align with the needs and demands for specialised skills, does not help to complete PEMEX's transformation into a competitive business and is not an effective way to create opportunities for career advancement and value added for the company.
- To develop its capacity for strategic workforce planning and maintain a structured and representative workforce of appropriate size to meet efficiently its changing needs, PEMEX needs to allocate responsibilities to its senior officials to ensure the right profile of the workforce and fulfil the company's strategic objectives; as well as to define general objectives regarding workforce planning, particularly in terms of numbers and costs, diversity, competencies, skills, and education requirements.
- While the jobs profiles used by PEMEX are quite complete, there are still some opportunities for improvement regarding the definition of indicators to assess performance and their linkage to job competencies. In the particular context of DCPA, for instance, only senior managerial positions (i.e., the Head of DCPA and deputy directors) have comprehensive job profiles, while those for subordinated positions still have to be developed. This is critical to facilitate an effective performance management process and assess what is achieved, giving employees feedback to address shortcomings.
- To develop its procurement workforce, PEMEX should strengthen DCPA capacities and make procurement managers accountable for the strategic management of their teams in order to spread a common understanding of PEMEX's vision and procurement business model; raise awareness of current and future skills and competency needs, anticipate future developments and maintain a structured and representative workforce of appropriate size to efficiently meet the changing needs of the company.
- PEMEX should improve the coordination between CAPAs and DCPA as to facilitate the exchange of knowlege and good procurement practices, ensure compliance of CAPAS with DCPA policies, improve learning, and above all, to commit the different units to a set of common goals and programmes. This coordination should be interpreted as a recognition of CAPAs capability to provide procurement services to the users in their geographic areas with the technical advice and training offered by the

DCPA. To effectively coordinate these activities, PEMEX could use information and communication technologies (ICT), especially for long distance assistance and supervision in conducting recruitment for procurement needs and plans.

- As PEMEX has an important role in the dynamic of Mexico's private sector, it needs to have the right number of procurement officials with a fit-for purpose set of competencies and skills to fulfil the corporate objectives. The three main challenges identified to strength PEMEX's procurement workforce are related to the set up of the organisational structure, the development of the required competencies to adopt best practices in a timely and efficiently manner and the development of human resources to facilitate the continuity of operations.
- In a survey on willingness to change and plans for widespread training made in October 2014 to 1 420 officials, PEMEX found a favourable perception towards the establishment of DCPA and the need for the evolution of PEMEX's organisational structure. However, at that time, while PEMEX's officials were in favour of PEMEX's transformation into a productive corporation, they also expressed high expectations about the professionalisation of the procurement function and doubts regarding job stability and the degree to which professional experience will be considered for career development.
- To professionalise its employees, PEMEX launched the initiative *Professionalising to transform*, but it needs to facilitate cultural changes in the management of human resources and in the behaviour of officials who are used to a highly bureaucratic culture. PEMEX provided to DCPA staff and all those employees taking part in the procurement process some training as part of this strategy to align the human resources management reform with the needs and demands for specialised skills and, at the same time, ensuring impartiality, flexibility and transparency.
- PEMEX also launched, in June 2014, different e-courses divided into four modules focusing on procurement structure and procedures under PEMEX Law; strategic supply; framework agreements and preparatory contracts; and bidding evaluation methods. This training sessions have been directed towards both kinds of employees, *confianza* and unionised but there is no standard frequency for training to take place, but usually responds to requests by staff and their corresponding areas. Seven e-learning courses concentrated on the basic procurement concepts, methodologies, and strategies provide harmonised knowledge to incorporate good practices and standardise the procurement function..Three additional courses on substance concerning strategic supply are offered: expenditure analysis, prioritising and selecting categories, stages of the methodology, and negotiation.
- One notable weakness of all these courses is that they do not include training on ethics and integrity issues. Entry-level and more experienced procurement officials do not have formal and on-the-job training programmes necessary to strengthen skills and knowledge to carry out their responsibilities and keep abreast of evolutions. Employees who take training do not receive any incentive as they are not certified, which hinders their perspectives for professional development.
- In order to improve the skills of procurement officials, the professionalisation of the procurement function could be supported through certification of skills and competencies by organisations such as the National Institute for Public Administration (*Instituto Nacional de Administración Pública*, INAP) or the National Council for Standardisation and Certification of Labour Skills (*Consejo Nacional de Normalización y Certificación de Competencias Laborales*, CONOCER).
- The training courses are not linked with performance evaluation and certification nor programmes for procurement staff, and therefore are not used to help defining the key competencies of procurement professionals, along with education and experience requirements. PEMEX should also make courses available through other different means than e-courses and open up other topics, such as financial analysis of suppliers, analysis of supply and value chains, market research, managing suppliers, risk management and contract management.

- The DCPA Deputy Directorate for Strategy Management and Support to the Business Model (*Subdirección de Gestión de Estrategia y Soporte al Modelo de Negocio*) is coordinating the change management strategy to implement PEMEX's new procurement business model. In this context, the DCPA is called to play the dual role of developing skills and capacities for the procurement function by working together with procurement staff to set challenging standards and provide them with access to learning and development opportunities. The DCPA and the Corporate Directorate for Administration and Services, which incorporated the HR functions since March 2016, could collaborate to build the procurement profession and develop a "Skills Frameworks for Procurement Practitioners and Procurement Leaders".
- PEMEX's transition opens up the opportunity to introduce a performance assessment model based on indicators aligned with the company's mission. This would help to recognise good work performance, address poor performance and identify staff training or development needs. This model would also enable operation managers to work with their staff and provide effective feedback, as well as concrete advice to address shortcomings. This implies a cultural change for which employees and middle and senior management level of PEMEX need to get prepared.
- PEMEX should train its middle and senior management to carry out performance assessment of their subordinates, who in turn need to clearly understand what is expected from them and receive feedback and support from their superiors to pursue improved performance.

### ***Proposals for Action:***

- PEMEX should engage in strategic workforce planning to facilitate monitoring of the numbers, costs, and competencies of staff, as well as aligning the future needs of human capital with the strategies of the company.
- PEMEX should enhance the cooperation and communication between DCPA and CAPAs in order to build procurement capacities through sharing of good practices at the managerial and training levels
- Executing, in a participative manner, the change management strategy for the implementation of the centralised procurement model and the alignment of the HR function. Developing a competency management framework to identify the skills and behaviours required for procurement staff to carry out its job effectively. Job profiling is also an element to set the foundations of a new procurement profession in PEMEX.
- Strengthening the HR Unit of the Corporate Directorate for Administration and Services and engaging it in the processes related to procurement staff (i.e., recruitment, selection, career planning). Bringing HR expertise into DCPA would make its processes more transparent, sophisticated, and reliable.
- Providing recruitment processes with more transparency and flexibility on the basis of merit and competencies. This entails opening up for competition vacant managerial positions, allowing internal and external applicants. Fair processes should be the mechanism to open opportunities for employees with procurement experience to move up in the hierarchy of the company. PEMEX could upgrade its recruitment and selection processes by making them more transparent, and based on merits and the assessment of competencies. To enhance the credibility of the recruitment processes., the OECD considers that PEMEX should engage the HR bureau of the Corporate Directorate for Administration and Services and delegating to it some of the activities involved in recruitment, such as elaborating exams, organising interviews, objectively assessing skills and competencies of the candidates, and producing a short-list from which DCPA could make the final selection.
- Introducing a performance management system and holding senior management accountable for performance. This entails setting performance objectives and implementing staff performance

management frameworks in all HR tools and processes, including job profiling, recruitment, selection and continuous evaluation.

- Stepping up systematic and comprehensive training to procurement staff, initially concentrating on the most critical weaknesses. Different training means, including the use of ICTs, should be facilitated, particularly for CAPAs.
- PEMEX could advance a system of secondments for procurement officials to public and private institutions in order to develop their skills and facilitate career advancement, as well as to bring in external expertise. Currently, secondments are not promoted.

## Chapter 5. Ensuring clarity and minimising procurement risks in PEMEX through strong tender documents and model contracts

The *2015 OECDs Recommendation on Public Procurement* encourages a coherent and stable institutional, legal and regulatory framework to increase participation in doing business as it is the key starting point to assure sustainable and efficient public procurement system. Creating clear and integrated tender documents, standardised where possible and proportionate to the need should encourage broad participation from potential competitors, including new entrants and small and medium enterprises. In this chapter, template contractual documents currently used for the acquisition of goods and services by PEMEX are assessed and some proposals for action to increase the results of PEMEX's contracting procedures are provided.

- Since the Energy reform, PEMEX's contracts are fully governed by commercial law and replace the former administrative contracting provisions. These contracts are used to all procurement and contracting activities and treats in equal terms suppliers who have now similar legal actions as PEMEX. The contractual terms of PEMEX's procurement documents are structured in compliance with the regulatory framework. The solicitation documents and model contracts of PEMEX use a generic model incorporated into all the procurement process allowing prospective bidders to better prepare themselves to participate in PEMEX tenders by referring to their previous experiences.
- Both PEMEX's solicitation process of documents and the development of model contracts are regulated by the principles set out in the Mexican Constitution, the rules on purchasing of the procurement chapter of Free Trade Agreements signed by Mexico (FTAs), PEMEX Act and its regulations, the *General Contracting Provisions* for PEMEX and its subsidiary companies (*Disposiciones Generales de Contratación para Petróleos Mexicanos y sus Empresas Productivas Subsidiarias*), the *General Guidelines for Procurement and Supply* (*Lineamientos Generales de Procura y Abastecimiento*) and the Policies and Guidelines for Procurement and Supply (*Políticas y Lineamientos para Procura y Abastecimiento*).
- The general framework for procurement contracts is detailed in *PEMEX Act* that set out key principles for procurement, provides the authorisation to choose specific methods under certain circumstances, establish clear contract dispositions on the parties' contractual liabilities and stipulates that project manager must foresee in all contracts a statute determining the liabilities (and the respective limits) of each party in accordance to the risk profile of the contract. It also refers to inspection, acceptance and warranty in procurement contracts and set forth the terms, conditions and proceedings applicable to the enforcement of contractual fines on account of non-compliance with specified performance indicators and on account of negative environmental impact of the execution of the contract by the contractor.
- The *General Contracting Provisions* categorize procurement methods available to PEMEX, stipulates the information needed by interested parties to decide on their participation in the contest, require that there be a term on intellectual property rights in the model contracts and refers to the essential information that model contracts should have, such as the identification of risks linked to the project, procurement process and execution of contracts, prevention and mitigation of risks and concentration of contracts in a single supplier or contractor based on the nature, scale and complexity of its object. The *General Guidelines for Procurement and Supply* specify on its side the appropriate requirements and contents of the contractual terms to simplify these documents.

- The OECD reviewed 5 template contracts (known as “model contracts”), 3 actual solicitation documents associated with public tendering and 1 signed version of an open contract for the acquisition of goods entered into by PEMEX Exploration under the applicable PEMEX Legislation. Overall, the OECD considered that while the new model contract has been drafted to be more accessible and user-friendly than the previous ones some improvements to the new generic contracts could be made.
- The legislative reforms have encouraged PEMEX to streamline the development process for solicitation documents and model contracts. PEMEX’s tender documents and template contracts analysed are fairly advanced and correctly enforced a reasonable level of impartiality, competition and integrity which clarifies the commercial and contractual relationship. Tender solicitation documents have more or less the same general contents and comply with the existing legislation on procurement providing a higher degree of transparency while granting a sound level of legal certainty to tenderers. Composed of between 20 and 30 clauses, their terms are further developed in annexes mentioning the form and terms of performance bonds, and a clear description of the quality and characteristics of goods, rentals and services being acquired. These annexes complete and complement the solicitation documents and offer a more comprehensive and transparent tender framework. They also contain an annex on PACMA, the support programme for the communities and the environment.
- PEMEX operationalises its awarding process in two phases; one using mandatory requirements to narrow the field of bidders and the second one including several different award criteria such as lowest price, equivalent annual cost, points or percentages, etc. The most commonly method used during the second stage is still the lowest price but PEMEX has an intention to use other methods in the future as a result of legislation changes.
- A comparison of one signed contract provided by PEMEX with a model contract identify a significant level of coherence between the two sets of documents. No substantial or material deviations have been found that could affect the transparency or legality of the awarded contract. Furthermore, a common structure between both is clearly traceable and most relevant clauses and contract annexes have been replicated. The main difference between both lies in the number of annexes and the description of the goods set forth in the annexes which are fairly exhaustive and technically clear.
- While some improvements have been made into model contracts since the review of 2012 which are more or less in line with the relevant terms of the applicable legislation regarding different subject-matters, there are still some potential opportunities to ensure clarity and equity throughout the procurement process and clarify internal procedures and communication between the supplier and the contracting authority.
- All the model contracts reviewed include per se intellectual property clauses and most of them the same prohibition for suppliers to use for commercial, advertising or any other purposes the name PEP, PEMEX and / or any of its subsidiaries productive enterprises and / or its subsidiaries, logos or any other sign or symbol distinctive property under any circumstances. The rights of suppliers to retain copyright and other intellectual property rights of the deliverables are clearly stated in the model contracts. As well as the rights specifying that the ownership lies with PEMEX.
- While PEMEX Act does not require that associated contracts include a clause on the negotiation of the transfer and awarding of the relevant intellectual property rights arising out of the contract to PEMEX, it has decided to continue including a clause on this issue in all generic contracts.
- The breakdown of obligations and liabilities between PEMEX and private contractors overall appears to be well-balanced under the model contracts. The transfer of risks scheme is in line with the experience of OECD countries and liabilities are determined on a case by case basis, commonly capped to the contract price, but the limit is not applied in case of negligence or misconduct. Contractor is

fully liable for third party damages and lost profits (*daños y perjuicios*), including environmental damages which need to be direct under Mexican law.

- PEMEX model contracts may also contain an advance payment regime which is to be considered reasonable and in line with its guidelines. Depending on the objective, purpose, length of solicitation period, duration of the contract and on the market environment, the model contract may include also a clause permitting advance payment or not which was not frequently before the enactment of the PEMEX law.
- The five model contracts reviewed include clauses on subcontracting in accordance with the legislative framework that requires that model contracts and solicitation documents include a clause with the exception of contract of services for exploration and extraction. The content is developed on a case by case basis. Under certain circumstances subcontracting has been considered specifically as part of the work in the solicitation process and in others more as a subcontracting element requested by the contractor after the contract has been awarded. This situation does not clarify what are the subcontracting rules, especially as it relates to the possibilities and conditions of subcontracts not considered in the initial contract, with the subsequent impact into transparency and integrity in the procurement process. However, there are other conducive examples in PEMEX model contracts that should be included in most contracts such as the clauses referring to the need for suppliers who wish to replace subcontractors to request permission from a project area administration.
- All PEMEX model contracts specify, in accordance with the current legislation, that the contractor cannot transfer in part or in totality these rights and obligations without prior and written approval of PEMEX. Also these contract include responsibility clause referring to the supplier is solely responsible for the contract obligations and that subcontractor have no recourse or any right to assert claims against PEMEX.
- Solicitation document indicates which costs are included or excluded within the contract. Model contracts are not specific regarding insurance as they merely state that contracting insurance policies is the contractor's responsibility.
- Model contracts analysed have several rules that are generally in one way or another connected with the transfer of ownership of the acquired goods but there is not a direct, clear and undisputed clause stating that as from a given date or event, the goods become PEMEX's property. The transfer of property ownership acquired by PEMEX is given at the time of delivery or on the terms of their respective contracts. While it is not clear under the current legislation, its scope is contained in the technical annexes that form part of the contracts.
- As for inspections of goods, the model contracts stipulates the right to return/replace products not meeting the contractual requirements but it is not clear regarding those cases where testing of goods after installation is needed. However, the annexes to model contracts refers to date for testing, completion of work, responsibilities associated, etc. Therefore, the model contracts could be amended to state that the first inspection is to occur upon delivery of the goods and that formal reception would only to take place if goods are approved under subsequent technical inspections and testing. PEMEX could consider including in the clause on reception of goods a paragraph referring to a written "confirmation of delivery, reception, installation, start up and operation" being provided when formal reception is concluded.
- The model contract could also incorporate clear provisions governing the time frame within which private contractors are liable for the integrity and quality of the goods or services rendered to provide . legal certainty to suppliers.
- Model contracts do not contain a clause of conciliation and/or arbitration in some situations and its other provisions provides the procedures if such approach is selected in case of disagreement between

PEMEX and its suppliers. PEMEX has decided to make this optional to include arbitration provisions in the new generic model contracts but not indicate whether in case of dispute, the contractor is allowed to stop performance under the contract before a decision has been passed and will receive compensation for associated damages should the decision be in its favour.

- The model contract will include a termination clause allowing suppliers to terminate the contract as a consequence of a grave default by PEMEX entitling the private entity to compensation that could be extended to other model contracts, adapting it as needed. This could induce a greater confidence in the public procurement system, increase the number of bidders with the consequent broader competition, foster transparency of the procedures and better value for money in the contracts.
- PEMEX currently includes on a case by case basis within the contract model a remedy period to the private contractor in the event of default but need to include it in some non-standard and in situations pre-established under each specific contracts (when deemed appropriate).
- The model contract does not also contain in its annexes provisions regarding replacement of personnel prior authorisation and approval by PEMEX based on what it was agreed in the respective contract such it is the case in exploration and production contracts (Integrated EP contracts). For doing so, Project manager who assess and prepare this contract should determine that employees have the proper qualification in case of changes to the personnel.
- Provisions addressing the terms and conditions applicable to the enforcement of contractual fines on account of delay in the delivery of the goods or execution of the services or if a damage is caused can also be included. PEMEX could consider clarifying under which terms and to what extent penalties could be implemented due to environmental issues.
- In the past PEMEX has been confronted with various risks relating to optional clauses being inappropriately used in contracts (such as arbitration provisions for short-term services contracts). The new legal framework and the centralisation of the procurement function in PEMEX could help mitigating the risk of using optional clauses.
- The Legal Department has developed most models of contracts as well as the 13 generic model contracts that will replace the current institutional contracts and have their own optional clauses subject to a negotiation process between PEMEX and the supplier in accordance with the new legal regime.

### ***Proposals for Action***

- To facilitate procurement relationship with its suppliers, PEMEX should have 13 models contract documents reflecting more precisely the specificities of a larger range of requirements and circumstances, and reducing the risk of optional clauses being inappropriately used;
- The contracts should include provisions describing clearly the timing and operating terms of the transfer of ownership of any product produced under the contract; warranty provision providing specific dates or time frame within which the private contractors is liable for the integrity and quality of the goods or services rendered. PEMEX could consider reviewing the applicable model contracts to ensure full clarity on the timing of the responsibilities of each party and on whether and when the associated elements of costs are included and excluded from the contract price, reducing the confusion and risk of dispute between the parties. It should also be more conclusive regarding whether VAT is to be added to the contracted price or not.
- Contractors will be prohibited in situation of dispute from stopping performance under the contracts before a decision has been passed, with associated rights to be compensated for damages should that decision be in his favour of them

- The contracts should include a clause describing the conditions and approval process to replace contractor personnel.
- Insert a clause covering the possibility of termination as a consequence of grave defaults by PEMEX and entitling the private entity to compensation should be inserted;
- Improve access of both parties to pertinent intellectual property rights by allowing for the possibility to provide to the contractor with a licence to use such intellectual property developed at certain stages of the project when it is determined that the associated benefits offset the costs of getting these rights,
- Have clear provisions associated with enforcement of contractual fines on account of non-compliance with identified performance indicators.
- Include incentive payment provisions, when considered appropriate, allowing additional compensation to the contractor in specific situations.
- Include termination rights for the supplier for non-payment of overdue undisputed charges certain working days after receipt of notice of non-payment.
- A gradual building up of the dispute resolution procedures beginning with an attempt at “good faith” resolution by the parties’ representatives, failing which the parties must use “reasonable endeavours” to resolve through “commercial negotiation”. Failing this, either party may opt for mediation conducted in accordance with a mediation agreement.
- Give PEMEX the option to invoke a new 'remedial adviser' process which in essence involves the appointment of an independent body by the authority to monitor the suppliers' performance.
- The contract could include an acknowledgement that the supplier's profit margin over the term will not exceed the "maximum permitted profit margin". That is, the profit margin identified in the supplier's financial model plus 5%. This mechanism gives the contracting authority the ability to renegotiate the charges should this point be reached, or, if suitable adjustments to the charges cannot be agreed, terminate for convenience.
- Incorporate a clause that PEMEX does not, in general, need to own specially-written or project-specific intellectual property rights but that a perpetual, royalty free licence, and the right to sub-licence, will suffice in most cases.

## II - FOSTERING INTEGRITY, TRANSPARENCY, AND ACCOUNTABILITY IN PEMEX'S PROCUREMENT FUNCTION

### Chapter 1: Ensuring Integrity throughout PEMEX's Procurement Cycle

Public procurement operations in the extractive sector present a high risk of corruption throughout OECD countries because of the significant level of expenditure involved and the complexity of the whole procurement cycle. PEMEX is not immune to such risks and, although it is developing initiatives and mechanisms to promote integrity in its activities and within the organization, it still faces a number of challenges in building a coherent and comprehensive integrity system and in creating a culture of integrity. The present Chapter analyses PEMEX's integrity policy and legal framework highlighting recent developments and emphasizing areas where further efforts are needed, which include: corruption risk-mapping, disclosure and management of conflict of interest, integrity training and awareness programmes, and whistleblowing protection. The Chapter also addresses the key role of the private sector and the importance of setting high standards of integrity for all stakeholders in the procurement cycle.

- The Energy Reform established an independent legal framework for PEMEX and its subsidiaries. Accordingly, PEMEX and its subsidiaries are now primarily subject to PEMEX Law and its implementing regulation and they should follow federal rules only insofar as they are explicitly mentioned or do not contradict the latter body of rules.
- As for the administrative responsibility arising from the corrupt practice of personnel, two legal frameworks currently apply to PEMEX (Table 1.1). On one hand, public servants working in PEMEX and its subsidiaries are subject to the Federal Law on Administrative Responsibilities of Public Servants (Ley Federal de Responsabilidades Administrativas de los Servidores Públicos, or LFRASP), which aims to enhance the legality and integrity of public servants' performance of their administrative duties by establishing the administrative faults, the procedure for taking legal action, and the modality and degree of sanctioning to be applied to public servants. PEMEX Law establishes a special regime for PEMEX's Board of Directors in relation to the exercise of their functions which exclude responsibilities under certain circumstances such as when they comply with the requirements for approval of matters of its competence, when it takes decision during sessions based on information provided by PEMEX directors, the external auditor or the independent experts and when it chooses the most appropriate business alternative or the negative asset effects were not foreseeable.

**Table 1.1. Integrity obligations as regulated by legal frameworks applicable to PEMEX’s Board of Directors and personnel**

	Board of Directors	Personnel
<b>Disciplinary regime</b>	Special regime established in PEMEX Law	Federal regime (LFRASP)
<b>Conflict of interest</b>	Special regime established in PEMEX Law and PEMEX Code of Conduct	Federal regime (LFRASP) and PEMEX Code of Conduct

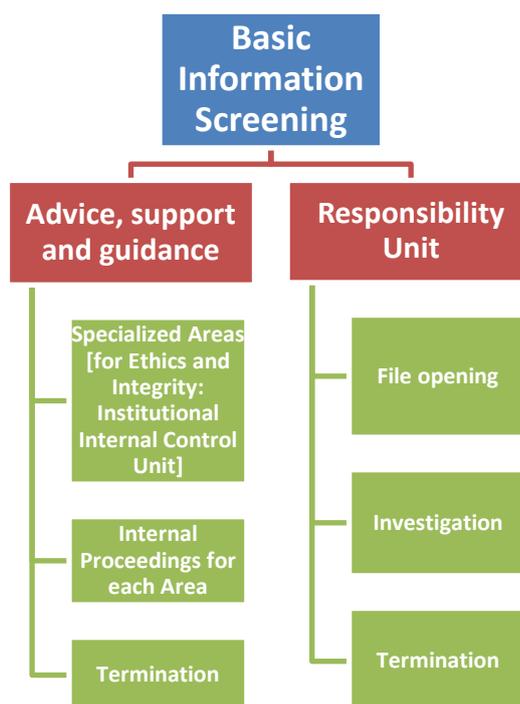
Source: PEMEX Law, LFRASP, PEMEX Code of Conduct.

- Administrative procedures are only envisaged for public servants, who can be sanctioned by PEMEX’s Responsibility Unit (*Unidad de Responsabilidades de Petróleos Mexicanos*), whereas actions for Board’s members responsibility can only brought through civil proceedings for compensation purposes. Considering the several crucial responsibilities on the procurement matters, PEMEX may consider introducing administrative rules and procedures for disciplinary breaches committed by its members as to ensure that the independence of the Board is not impaired.
- In the context of the new legal framework, PEMEX has identified integrity as a priority and, in February 2016, issued the new *Code of Ethics and Code of Conduct*, specific provisions on conflict of interests as well as the Ethics and Corporate Integrity Programme (*Programa de Ética e Integridad Corporativa*) with the purpose of building its integrity framework upon the following three pillars : creating an ethical and integrity environment, carrying out anti-corruption actions, improving due diligence of third parties and developing coordination and communication mechanisms. While the Codes are quite comprehensive and provide rules to tackle issues such as corruption, conflict of interest, influence peddling and on bribes and gifts/invitations, they only apply to the personnel and the members of the Board of Directors.
- Key partners such as consultants and suppliers, whose behaviour may also influence the reputation and image of the company are not covered by the *Ethics and Code of Conducts* rules but need to aware on the expected behaviours when interacting with PEMEX.
- While PEMEX has elaborated a map risk management strategy in relation to its procurement processes consisting in a matrix identifying 183 critical activities, 205 risks and 175 controls, it does not include corruption or other integrity breaches. Although PEMEX is expected to review the design of a monitoring, evaluation, and risk-mitigation system, currently there is no alert mechanism or red flag that could help to detect corruption and unethical behaviour in a systematic and timely manner.
- Considering the existing fragmented regime characterising conflict-of-interest regulation, there seems to be a lack of a consistent and comprehensive framework to manage conflict-of-interest situations within PEMEX. Generally speaking, conflict of interest obligations for public officials are established in LFRASP, which defines a situation of conflict of interest when “the personal, familiar or commercial interests of the public official may influence the impartial performance of her/his work, duty or task.” In addition to this framework, the *Agreement CA-125/2015 of PEMEX’s Board of Directors on General Provisions for Contracting* (*‘PEMEX Agreement CA-125/2015’*) contains also a section on integrity matters which targets specifically the staff of the procurement area (*Área de Procura y Abastecimiento*) and Project Managers. Conflict of interest is also addressed in the Code of Conduct, which applies to both personnel and members of the Board of Directors. The latter Code sets out desirable conducts as well as recommendations to be followed by PEMEX’s staff.
- Staff members of the procurement area need to comply with the Codes of Ethics and Conduct and submit an asset declaration in line with the obligation provided for by the LFRASP for certain categories of public servants. Conflict of interest is also addressed in the Code of Conduct, which applies to both personnel and member of the Board of Directors and sets out desirable conducts to be

followed by PEMEX's staff. Members of the Board of Directors of PEMEX are, on their side, subject to PEMEX Law and Regulations which provides a special conflict of interest regime for them. This regime includes a list of prohibited and non-prohibited conducts, a yearly obligation to disclose extra professional activities, as well as a mechanism to assess situations where there could be a conflict of interest in the latter activities.

- Given the sensitivity of the procurement activity, PEMEX may consider to introduce mechanisms which could extend conflict of interest reporting obligations to the private actors at an early stage of the procurement process.
- A lack of knowledge of the *Codes of Ethics* and *Conduct* of the personnel involved in procurement activities exist. According to the information provided by PEMEX, the company organises an induction e-learning course; however, it is not clear how and to what extent it addresses issues related to ethics, integrity and corruption. Furthermore, such a programme is only made available to one category of employees (so-called "trust personnel" or *personal de confianza*), so PEMEX could consider extending to all other personnel.
- PEMEX has recently established an Ethics Committee (*Comité de Ética*) that is composed of representatives from each corporate unit and supports PEMEX in improving ethical standards within the organisation. Furthermore, it analyses reports over potential breaches to the Code of Ethics, provides strategies to increasing compliance with the corresponding standards as well as their knowledge and practice among employees. Most relevantly, the Ethics Committee is assigned the function to act as a consulting and advising entity specialised in issues related to the application of, and compliance with, the Codes of Ethics and Conduct (Reglas de Operación Del Comité de Ética de Petróleos Mexicanos, sus empresas productivas subsidiarias y empresas filiales). In spite of the latter mandate, there is no evidence that the Ethics Committee, and PEMEX in general, offers its employees the opportunity to discuss ethical issues arising in the workplace or provides guidance on how to behave in dubious situations,
- In addition, PEMEX has currently two separate channels to report misconduct related to ethical behaviours: one for breaches of the Code of Conduct (Mecanismo para la Atención del Incumplimiento al Código de Conducta) and the other for any kind of complaints ([www.quejasoic.pemex.com](http://www.quejasoic.pemex.com)). While the former reports are assessed by the Internal Institutional Control Unit (Unidad de Control Interno Institucional, or UCII), the latter are handled by the Responsibilities Unit (Unidad de Responsabilidades), which is under the umbrella of the Ministry of Public Administration (Secretaría de la Función Pública, or SFP). The two channels are available on different websites, the first one on PEMEX's Code of Conduct webpage ([www.pemex.com/acerca/codigo-de-conducta/Paginas/default.aspx](http://www.pemex.com/acerca/codigo-de-conducta/Paginas/default.aspx)), the second on a website managed by the SFP ([www.quejasoic.pemex.com/Index.html](http://www.quejasoic.pemex.com/Index.html)). Neither of the two webpages informs the user of the existence of the other mechanism, nor provides a link to it. More generally, the accessibility from the homepage is not straightforward and requires navigating PEMEX's website through different levels.
- In 2015, PEMEX launched an *Ethical Help Line* (*Línea Ética de Ayuda*) with the aim to improve clarity and ensure co-ordination in the receipt and elaboration of the reports received. According to the information provided by PEMEX, there should be a single channel to report misconduct, which will then be filtered and forwarded to either the UCII or the Responsibilities Unit (Figure 1.2). However, there is no evidence on how the new mechanism works in practice so it is difficult to assess whether it addresses some of the above-mentioned challenges related to co-ordination and accessibility.

**Figure 1.2. Outline of the PEMEX Ethical Help Line (Línea Ética de Ayuda)**



*Source:* Based on PEMEX (2016), “Línea ética de ayuda y mecanismos de coordinación para la atención de denuncias”, presentation by PEMEX.

***Proposals for Action:***

- PEMEX could seize the opportunities given by the Energy Reform to strengthen its legal framework for corruption prevention by defining the exact scope and application of integrity rules to suppliers and external stakeholders and providing comprehensive guidance on integrity matters and publicly clarify applicable anticorruption and transparency obligations among all the parties involved in the procurement process.
- PEMEX could extend the existing integrity policy and standards to all those working for PEMEX and its suppliers, such as consultants in order to level the playing field among people working in the company, while setting clear standards to deal with the confidential and privileged information which they might have at disposal.
- PEMEX could provide guidance to deal with conflict of interest situations which may arise between consultants and clients and extend the scope of PEMEX’s Code of Ethics and Code of Conduct to all the partners interacting with the company and expect from them the same level of integrity required for its personnel.
- PEMEX could strengthen its preventing approach to corruption by mapping corruption risks of the organisation and its processes in order to identify issues such as vulnerable positions, as well as risky activities and projects,
- PEMEX could also develop a system of warning signals – such as red-flags – in relation to critical processes, vulnerable positions, risky activities and projects, set up a system to map risks of corruption in relation to each project to ensure the integrity and responsibility for all stakeholders involved in each procurement process.

- PEMEX could introduce a system to monitor and periodically evaluate the map in order to ensure that its corruption risk assessment strategy remains actual and effective.
- PEMEX needs a comprehensive policy framework on conflict of interest to manage conflict of interest defining the disclosure of a private interest as a first necessary step to be taken to determine what measures are needed to resolve or manage the conflict positively, improve transparency over the qualification and selection process of the independent members of the Board of Directors and introduce mechanisms to extend conflict of interest reporting obligations to the private actors at an early stage of the procurement process.
- PEMEX could further ensure that integrity measures are effectively enforced, especially in relation to the disciplinary liability for independent members of the Board of Directors by introducing administrative rules and procedures with respect to the investigation and sanctions that do not impair their independence, and develop a statistical data on the disciplinary procedures of both the personnel and the Board.
- PEMEX could incentivise stronger integrity on the part of its suppliers through various means, including greater transparency, introducing integrity standards for eligibility, and ensuring effective sanctions through publication of the PEMEX's suppliers declaration, systematically checking whether such declarations correspond to reality and by stimulating suppliers to develop their own integrity standards and programmes.
- PEMEX needs to strengthen its culture of integrity through more ambitious efforts for awareness raising and capacity building of its employees' knowledge of the Codes of Ethics and Conduct through publications, ad-hoc training on integrity and ethics-related issues to procurement officials and officials in high risk positions, an open organisation culture to guide and support staff in applying ethical values and integrity standards in their daily activity and an on-line portal to provide ethical advice to both internal and external subjects, also anonymously.
- PEMEX should effectively protect whistle-blowers by improving accessibility of existing disclosure channels, creating a single reporting procedure or, at least, presenting the existing ones in a single webpage together with tools to support users in deciding which channel they should use.
- PEMEX should also implement an the Ethical Help Line (*Línea Ética de Ayuda*) that gives the possibility to make anonymous disclosures and raise awareness about it among employees and publishing reports over the whistleblowing activity to publicly illustrate the yearly activity of the company on this issue as well as to assess and monitor its effectiveness.

## Chapter 2: Ensuring accountability through transparency and stronger engagement with civil society

*Ensuring an open and transparent procurement system in all stages of the procurement cycle is a fundamental element to guarantee fair and equitable treatment for PEMEX's potential suppliers and to promote accountability of its activities toward all stakeholders. The Mexican legal framework on transparency and access to information has improved in recent years due a federal reform which introduced several changes at the institutional and substantial level. Further obligations apply to all public entities working in the energy sector and provide for enhanced transparency for PEMEX procurement information. This Chapter assesses the impact of the latter changes and elaborates recommendations on how to further ensure that transparency measures and mechanisms for stakeholder participation lead to effective accountability of PEMEX's activity. Such assessment does not only consider the accessibility and the format of public procurement information, but it also addresses the balance between transparency and confidentiality, as well as the participation of social witnesses and the engagement with the private sector.*

- Mexico has been working to improve its framework on transparency and access to information through a major reform that addressed both institutional and substantial issues (Ley General de Transparencia y Acceso a la Información Pública, or the Transparency Law). PEMEX, as any other entity receiving public funding or exercising public authority, is subject to the new regulation. It also has to comply with specific provisions for entities working in the energy sector, which requires maximum transparency of some acts (contracts, permits, joint ventures, companies) and sets a minimum set of information to be disclosed through mechanisms that guarantee circulation and public consultation (Article 83 of the PEMEX Law). Further obligations are set for federal and constitutionally autonomous entities by the *Federal Law on Transparency and Access to Public Government Information* (Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental).
- With specific regard to PEMEX's contracting activity, the PEMEX Law has introduced an online system of public information about suppliers that should be regularly updated and contain information on the contracts signed in the last five years (Sistema de información pública de proveedores y contratistas). At the institutional level, in May 2015 PEMEX and INAI signed a co-operation agreement (*convenio general de colaboración*) and agreed to work together on a number of initiatives that aim to strengthen the culture of transparency, openness, and personal data protection.
- The answers and the evidence provided show that PEMEX is making efforts to align to the relevant legal framework and to ensure proactive disclosure of information concerning its procurement activity. However, concerns remain on the fragmentation and accessibility of the information, which affects its overall quality and creates difficulties for citizens and suppliers who wish to consult it.
- A relatively recent trend undertaken by many countries to increase the transparency and accountability of public institutions is to make their data available to the public and allow the use, reuse and free distribution of datasets through the so-called open data format. PEMEX is still lagging behind in the use of open data of its procurement activity, as no evidence was provided or founded on this specific topic.
- PEMEX's current legal framework provides exceptions to transparency in so far as it considers a number of situations where the information may be classified as reserved or confidential. PEMEX Law refers to the latter cases and envisages the adoption of measures to protect information related to business, economic and industrial activity, as well as to maintain a competitive or economic advantage over third parties in the realization of its activity. Such rules have been also specified in PEMEX Agreement CA-117/2014, establishing that all information is public unless is considered an industrial

or commercial secret according to the Intellectual Property Law (*Ley de la Propiedad Industrial*) and that the heads of administrative units should restrict the disclosure of such information.

- Given the new competitive context and the sensitivity of some information activity, PEMEX is faced with the challenge to protect sensitive commercial information and competition, but at the same time ensure full transparency of its procurement activity. PEMEX should ensure clarity and consistency of its transparency framework to promote fair and equitable treatment for potential suppliers.
- Mexico has been at the forefront of allowing the involvement of civil society in procurement process by introducing the so-called “social witnesses” (*testigos sociales*) established in the Public Procurement Law (*Ley de Adquisiciones, Arrendamientos y Servicios del Sector Público*) that envisages the mandatory participation of social witnesses in all stages of public tendering procedures above certain thresholds, which in 2015 were MXN 350 million (approximately USD 23 million) for goods and services and MXN 710 million (approximately USD 47 million) for public works.
- While the Public Procurement Law does not apply to PEMEX, PEMEX Law and its Guidelines (*Lineamientos para la participación de testigos sociales durante actividades de procura y abastecimiento y procedimientos de contratación de Petróleos Mexicanos y sus Empresas Productivas Subsidiarias*, or Social Witness Guidelines) foresee the participation of social witnesses in procurement processes to observe the steps of the contracting process, release a final report with comments, and eventually report irregularities to the Internal Audit Office. Unlike in other organizations of the Mexican government, social witnesses in PEMEX are not nominated by the Ministry of Public Administration (SFP) but rather by an internal Appointment Committee (*Grupo de Designación*). Furthermore, they may participate when the procedures are authorised by the Board of Directors; when is required by the Procurement Committee; and when is solicited by the Procurement Area with the subsequent impact of lower level of predictability of social witnesses’ role in PEMEX procurement activity.
- The presence of social witnesses during the contracting proceedings is an important element testifying PEMEX’s commitment to ensure social scrutiny over its procurement activity in line with the model successfully implemented at the federal level. PEMEX currently publishes the sessions of the Appointment Committee as well as its minutes through its website thereby ensuring an adequate level of transparency of its activity. However, the criteria provided for by PEMEX’s legal framework are dependent on decisions taken by other bodies (Board of Directors, Procurement Committee, Procurement Area), thus they may be conducive to more discretionary decisions and eventually to a lower level of predictability of social witnesses’ role in PEMEX’s procurement activity. At the same time, PEMEX is called to address the impact of social witnesses’ observations, as they are contained in a final report and not necessarily taken into consideration by PEMEX.
- Next to social witness, there are other way for civil society to exercise scrutiny over PEMEX procurement process: firstly, through a program called “Electronic witness” (*testigo electrónico*) whereby procurement events are transmitted via internet; secondly, experts could participate in the elaboration of the Norms of Reference (*Normas de Referencia*, or NRF) for particularly sensitive procurement, although this method of participation is not anymore relevant after the entry into force of PEMEX Law.
- In the OECD Recommendation on Public Procurement, the OECD stresses the importance of fostering the transparent and effective participation of different kinds of stakeholders, which should be subject to fairness, transparency and integrity standards. The information provided by PEMEX shows a lack of significant initiatives to involve private stakeholders in the procurement process cycle. At the same time, there were no objective criteria to assess whether they are applied constantly and consistently throughout PEMEX’s procurement activity.

### *Proposals for Action:*

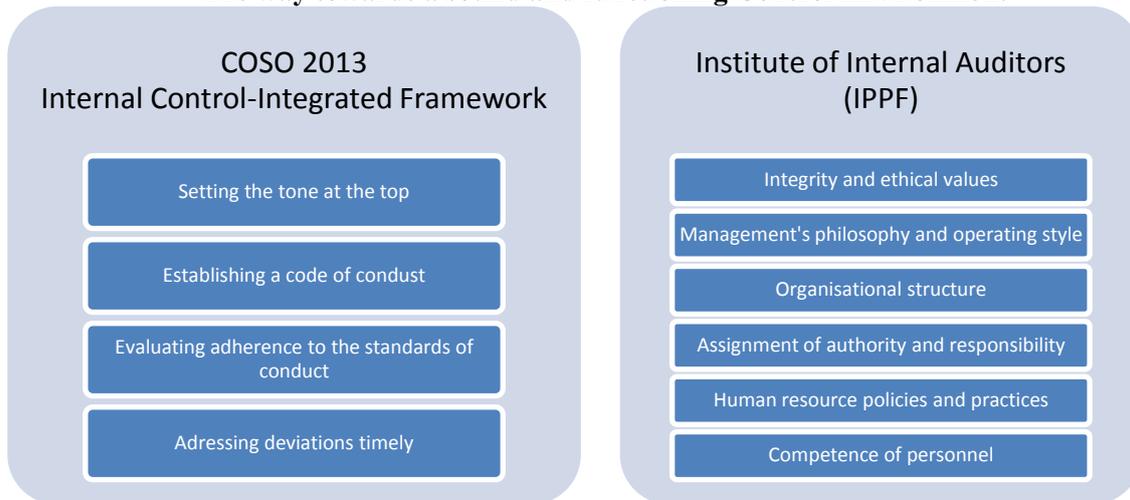
- PEMEX could improve the accessibility of its public procurement information, particularly through a single database containing all the information which are currently available through various channels and present this information in an interactive, user-friendly, and easily accessible way in the website.
- PEMEX could consider publishing its procurement information in open data format in order to further contribute to enhance transparency and accountability based on the Open Contracting Global Principles, which would make contracting more competitive and fair, improving contract performance, and securing development outcomes through the disclosure of documents and information.
- PEMEX could also set up an open data portal following international best practices monitoring public infrastructures and mega-events.
- PEMEX could establish and make publicly available a disclosure policy identifying what information should be publicly disclosed by law, together with the appropriate channels for disclosure, and mechanisms for ensuring access to information that promote fair and equitable treatment for potential suppliers,.
- PEMEX may draft a set of guidelines illustrating its policy on transparency and confidentiality, clarifying which kind of information is disclosed and publishing it on line and clearly illustrate on its website the procedure to access information using an accessible link to relevant mechanisms.
- PEMEX could increase transparency over the selection of social witnesses in order to increase the legitimacy of the initiative and ensure trust around its contracting activity by making clearly accessible a section of the website on social witnesses from the main procurement page and introducing additional integrity requirements for PEMEX's officials who select social witnesses together with the obligation to make public their asset and conflict of interest declarations.
- PEMEX could introduce clear and non-discretionary criteria for participation of social witnesses in line with the federal legal framework and introduce a set of thresholds above which PEMEX is legally required to include their participation in all stages of public tendering procedures.
- PEMEX could improve the impact of social witness' activity through greater transparency around their observations and follow up by publishing their reports in a clear and searchable way, avoiding scanned version in pdf format, and introducing the obligation to provide written public feedback to every suggestion raised by social witnesses similarly to the mechanism already in place to give feedback to the human rights commission.
- PEMEX could engage more frequently and meaningfully with the private sector thereby ensuring that its integrity policies are well communicated and complied with more effectively by developing further initiatives to involve them in the procurement process cycle.
- One example is to allow education institutions, schools or professional institutes to participate in the elaboration of the tender documents independently of the participation of one or more social witnesses.

### Chapter 3: Fostering effective internal control and risk management in PEMEX's procurement activities

*A robust internal control system, including risk management and independent internal audit functions, is the bedrock for improving governance and management systems, enhancing integrity, and strengthening accountability. This chapter presents how a pre-emptive and risk-based approach is the best way for PEMEX to improve the efficiency, effectiveness and economy of operations while putting in place the proper controls and mitigating strategies to prevent, detect and respond to fraud and corruption schemes in the procurement cycle. The challenge ahead lies with integrating internal control and risk management activities in every step of the procurement process and assigning concrete roles and responsibilities across all areas, and personnel of the company. PEMEX is transitioning a major reform and internal control arrangements can provide assurance that corporate governance structures, strategic planning and operational management in the area of procurement are properly functioning. Assurance maps are a very powerful tool to provide confidence and evidence that procurement is conducted both ethically and economically. Solid oversight, insight and foresight arrangements can identify threats and opportunities and allow PEMEX to design and implement evidence-based policy choices that will steer the company towards achieving its objectives and facing the challenges ahead*

- Prior to the Energy Reform, PEMEX's internal audit function was part of the mission of the Internal Control Body (*Órgano Interno de Control*, OIC) and was supervised by the Ministry of Public Administration (*Secretaría de la Función Pública*, SFP) which created confusion between the internal control and the internal audit functions and processes.
- PEMEX current organisational structure provides for an independent internal audit unit which reports only to the Audit Committee and the Board. This approach is up to international corporate governance standards and PEMEX is focusing on mainstreaming internal control and risk management functions. External oversight in relation to financial reporting is provided by private audit firms, while the Superior Audit Office of the Federation (*Auditoría Superior de la Federación*, ASF), which is Mexico's Supreme Audit Institution (SAI) evaluates the maturity and the implementation of the internal control and risk management components and activities.. The ASF reports have provided very useful recommendations towards enhancing integrity and strengthening its internal control and risk management system.
- It is worth mentioning that according to the information provided by PEMEX (update 10 November 2015) deriving from the data base of observations issued either by internal control unit or the ASF, PEMEX and four affiliated companies (PEP, PGPB, PPQ and PRF) had a total of 2670 observations out of which 52% deals with public works and procurement. Moreover, the detailed data on PEMEX indicate that 27% of the issues examined related with the acquisitions, leasing and services area with another 25% arising from the public works area.
- PEMEX's internal control system (*Sistema de Control Interno-SCI*) is based on the COSO 2013 Internal Control-Integrated Framework. Establishing a sound internal control environment based on ethical values and demonstrating commitment to integrity is the cornerstone for a functioning internal control system.. PEMEX has adopted a *Code of Ethics* (November 2014) and a *Code of Conduct* (February 2015), but the challenge lies in integrating these integrity instruments in management systems and day-to-day operations.

## The way towards a sound and functioning Control Environment



Source: Adapted from OECD Secretariat from COSO 2013 Internal Control-Integrated Framework and IIA – International Professional Practices Framework (IPPF)

- PEMEX’s Audit Committee has to ensure that the organisation’s culture aligns with its code of conduct and that behaviours are consistent across all organisational levels and business areas.. Senior management has to lead by example and set a clear “tone at the top”. Continuous monitoring and reporting activities can identify patterns and anomalies that call for closer attention and provide evidence on whether business and integrity risks are adequately identified and properly mitigated..
- PEMEX has to motivate and empower personnel and third parties to embrace its corporate values and integrity standards which means that improper conduct must be monitored and sanctioned. Whistleblower channels and effective complaints management can send a clear message to PEMEX’s staff and external parties of the company’s commitment to integrity and its ability to effectively manage wrongdoing and misconduct..
- PEMEX is leveraging the internal control components and functions across the the Three Lines of Defense Model in order to allocate concrete roles and responsibilities and address the “silo” approach and the “tick the box” mentality concerning internal controls and risk management activities. PEMEX is focusing on bridging the implementation gap and clarifying which units are part of the first and the second line of defence. In this framework, PEMEX has launched an ambitious communication and raising awareness campaign to highlight the added value of robust internal control activities and get line management and staff involved in owning the risks, designing and applying cost-effective controls.

## PEMEX’s Enterprise Risk Management Framework



Source: Presentation by the Corporate Directorate of Finance, Marco de Administración de Riesgos Empresariales (MARE), Sub-direction of Assurance and Risk Management, November 2015

- The internal audit function is the third line of defence acting as a consultant and a “key agent of change”. Internal audit has a key role in providing assurance that the internal control arrangements are properly functioning, and key business processes, like procurement, are conducted both ethically and economically. A sound assurance mapping function can be a most valuable management tool providing evidence-based information on the services being delivered, the activities undertaken, the level of associated risk, areas where assurance activities are either not present or insufficient as well as areas where assurance is duplicated or excessive in comparison with the value of the activity being undertaken. This way competent PEMEX’s actors can get a better grasp of the risk exposure and steer proportionate assurance provision where there is actual need.
- The Board and the Audit Committee of PEMEX should ask for assurance that the whole procurement process is designed and implemented towards adding optimal value to PEMEX by focusing on quality outcomes rather than being cost driven. Its audit program should aim to identify specific high risk components of the procurement process and ensure the adoption of appropriate mitigating policies..
- PEMEX created a corporate wide Risk Committee (CRPEMEX) to ensure that risk management is properly functioning corporate wide and is considered an integral part of good governance and management systems.. CRPEMEX is working closely with the business units to communicate a sound risk culture, address the implementation gap and highlight the cross-functional relationships within the group in relation to effective mitigation of business and integrity risks.
- CRPEMEX is also working closely with the Audit Committee (CAUD) by reporting the advances in implementing MARE and incorporating risk elements in the decision making process. Priorities include the identification of the critical corporate risks, the clear assignment of roles and responsibilities between the different actors involved in risk management (CAPEMEX, CAUD, DG and CRPEMEX), and the participation of the internal audit unit in CRPEMEX in a supportive and consultative role.
- PEMEX could also further engage in due diligence assessments of existing and candidate suppliers and contractors and asking them to complete integrity and anti-corruption training modules similar to those developed for PEMEX’s procurement staff.
- PEMEX should consider developing and implementing an autonomous fraud and corruption risk management framework in order to highlight the importance and raise awareness over this category of risks. Although this could duplicate certain risk management activities, it could be an intermediary solution until corporate risk management is mature enough and integrated in PEMEX’s governance and management systems.
- PEMEX has to adopt rigorous hiring and promoting policies to ensure that only staff with the right skills and ethical values is working in high risk areas. These tools could include background investigations; verifying education certificates, employment history and references and regular individual performance reviews and objective compliance review of the code of conduct and ethics policies.

**Proposals for Action:**

- PEMEX should act on strengthening its internal control system by ensuring a sound and functional control environment underpinned by integrating ethical values and integrity into daily operations.
- PEMEX should consider taking concrete action to highlight the importance of setting a clear tone at the top to create a robust and effective control environment.
- PEMEX should focus on establishing a robust assurance-providing function to support the Board on meeting their corporate governance obligations and the company's delivery and accountability needs.
- PEMEX must focus on addressing the implementation gap and integrating the risk-management process into day-to-day activities across all areas and organisational levels of the company.
- PEMEX should consider developing and implementing an autonomous fraud and corruption risk-management framework.

## Chapter 4: PEMEX'S review and remedy system on procurement decisions

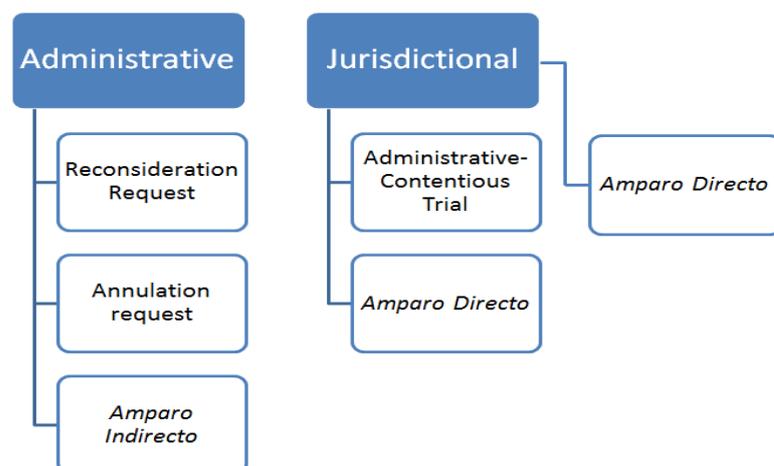
Review and remedy mechanisms contribute to increase the overall fairness, lawfulness, and transparency of procurement procedures and support their integrity. They also build confidence among businesses and facilitate competition in public contract markets. These mechanisms provide an opportunity for bidders to contest the process and verify the integrity of the award. A body with enforcement capacity, independent of the procuring entity, should rule the review decisions. Complaints must be resolved in a fairly and non-discriminatory manner whilst ensuring administrative efficiency through timely, transparent and clear resolutions and adequate remedies that are kept available to the public.

- The review and remedy mechanisms applied to PEMEX procurement procedures has evolved through time as a result of the amendments introduced by the Energy Reform. Bidders are informed in the calls for tender that they may challenge award decisions in public tenders or restricted invitations by submitting a reconsideration request (*Recurso de Reconsideración*, RR) and/or a jurisdictional action called the administrative-contentious trial (*Juicio Contencioso Administrativo*, JCA).
- The RR is filed before a collegiate body of three members who are public officials with the hierarchical level of managers and who cannot abstain from voting, except when there is a legal obstacle. This internal body of PEMEX is presided by the Head of the Institutional Internal Control Unit (*Unidad de Control Interno Institucional*, UCII) whose vote prevails in case of a tie and two other members are appointed by the Corporate Director for Planning, Co-ordination and Performance; and the Legal Director, respectively. Its function is not only to decide on the RR and their incidents but also to provide instructions to the Technical Secretariat to take the necessary actions to substantiate the RR.
- The Technical Secretariat is led by the Manager for Legal Affairs and Administrative-Contentious (*Gerencia Jurídica Contenciosa Administrativa*, GJCA), which provides legal advice to the collegiate body, puts together the file for decision, prepares the draft resolutions, notifies the resolutions, and executes the administrative acts required by the collegiate body.
- The JCA is filed before the Federal Tribunal for Administrative Justice (*Tribunal Federal de Justicia Administrativa*, TFJA) which is regulated by the Federal Law of Contentious-Administrative Procedures (*Ley Federal de Procedimiento Contencioso Administrativo*). Bidders complaints are solved in a length of time that depends on the workload of the tribunal, which could take several months or even years.
- The resolution of the collegiate body after the review of the RR cannot be challenged by administrative means, but only through an annulment request (*Demanda de Nulidad*) filed before the TFJA, or the *Juicio de Amparo Indirecto*, before a District Judge for Administrative Matters (*Juez de Distrito en Materia Administrativa*).
- Once the instruction of the RR is complete, the collegiate body prepares a resolution, which cannot be appealed through administrative means. The RR should explain the facts or omissions that provide background to the award decision, the estimated damages, and the evidence related with the above mentioned acts or omissions. Resolutions on RR take on average between 30 and 35 days.
- While bidders have the choice of filing a RR or a JCA, the existing difference on the composition of the decision bodies, the guarantees to be provided by the bidders requesting suspension of the award

decision and the length of time for taking the decision may create incentives for bidders to prefer one of the two mechanisms.

- There is no public information in PEMEX website about the number of RR or JCA and their corresponding resolutions. Therefore, PEMEX should explore ways of increasing transparency by committing to make public in its website, in a regular, user-friendly manner, the resolutions of the RR and JCA and by implementing an effective search engine to facilitate access.
- The RR can only be filed by bidders who actually participated in a tender and its effect is to overturn, modify, or confirm, totally or partially, and definitively, an award decision. It is filed in written form within five days of the public meeting in which the award decision was taken or notified to the awarded entity, in case such public meeting did not take place. In the case of joint proposals, the RR should be filed with the signature of all the co-bidders. If this condition is not met, the RR is disregarded.
- The filing of a RR suspends the award of a contract until resolution when such suspension is requested, there are no damages to the public interest or no contradictions with public order regulations, and *if* the bidder filing the RR meets the legal requirements. If the collegiate body identifies possible or current acts violating applicable regulations, it may suspend the award decision but only when the resolution has not been issued.
- As the bidder filling the RR should provide a guarantee equivalent to an amount between 10 and 30% of his or her economic proposal or to the budget of the corresponding tender procedure if the amount cannot be estimated, the suspension of the award using this mechanism could be an onerous procedure.
- If the PEMEX unit in charge of the bidding process does not comply with the resolution, the awarded bidder or the one who filed the RR can inform the collegiate body so that it requires compliance and, if necessary, informs the Responsibilities Unit, which applies the Federal Law for Administrative Responsibilities of Public Officials (*Ley Federal de Responsabilidades Administrativas de los Servidores Públicos*).
- The challenging bidder can even skip the RR and the JCA and go directly to the *Amparo Directo* alternative.

**Figure 4.1: Challenge mechanisms for PEMEX award decisions**



- One more alternative for bidders contesting the fairness of procurement procedures, particularly of the actions of public officials involved in such procedures is to submit a complaint (*quejas y denuncias*) before the Responsibilities Unit (*Unidad de Responsabilidades*) that investigate, substantiate procedures for administrative responsibilities, and impose the corresponding sanctions.

- The UR is hierarchically subordinated to the Ministry of Public Administration (SFP), which appoints its head and determines its organisation and operations. The UR is regulated by the rules applicable to responsibilities units of the Internal Control Bodies of the public administration., The management of complaints against PEMEX's public servants has not changed significantly, besides from the fact that severe violations of administrative nature are now sanctioned by the TFJA.
- Complaints may be of limited usefulness for bidders, who prefer the challenge mechanisms to contest the award of contracts. The legal effect of complaints is limited to investigating the possible administrative responsibilities of public servants and, if applicable, launching the corresponding disciplinary process. However, complaints cannot lead to the suspension of an award of a contract.
- The new regulatory framework applicable to PEMEX procurement eliminated the intervention by default (*intervención de oficio*), under which the authority could declare null the whole procurement process or part of it. This procedure gave the authority the attribution to get to know the complaint (*inconformidad*), even if it was flawed, against an award decision to verify the legality and determine the suspension of the procurement process when breaches to the legal framework are evident, but no damage to the social interests and contradictions to public order regulations exist.
- Prior to the changes to the procurement legal framework, the authority reviewing challenges to award decisions filed through the administrative channel (*inconformidades*) was the Ministry of Public Administration (*Secretaría de la Función Pública*, SFP) of the Federal Government, while under the new regime the entity that reviews RR is the collegiate body within PEMEX.
- As the intervention by default is no longer possible, the only mechanism to declare null the whole procurement process is when the collegiate body realises the actual or possible occurrence of illegal acts, but requires that a RR is filed by a bidder and the suspension of the award decision can only take place before the RR is settled.
- As for duly signed contracts to which PEMEX takes part, these are subject to commercial and civil law and, as such, controversies between PEMEX (or one of its subsidiaries) and a supplier dealing with contract execution are settled through the competent tribunals of the Federal Judicial Power (*Poder Judicial de la Federación*), except in cases where an alternative resolution mechanism exists such as a claim (*reclamo*) on technical or administrative controversies that must be filed before the responsible department of PEMEX in charge of managing and supervising contract execution, disagreements on contractual requirements compliance that must be filed before the SFP, and alternative commercial dispute resolutions mechanisms included in the contract.
- From 2012 to 2015, *inconformidades* decreased by 85%. PEMEX explains such decrease as a result of less tender procedures, lower procurement budgets, and the implementation of strategic supply and category management. The increasing number of direct awards from 2012 to 2015 also had an impact on the number of administrative challenges.
- There is also a low number of RR in comparison with the number of administrative challenges (*inconformidades*) filed under the previous regime, which may be a consequence of budgetary restrictions, the concentration of procurement procedures by categories and the standardisation of PEMEX's procurement activities. The learning curve of suppliers might also have to do with the low number of RR filed.
- PEMEX would benefit from a low number of challenges on its procurement procedures in the long-term and could maintain this number low by implementing the proposals to increase the integrity of the evaluation process, performing a detailed analysis of the resolutions of the challenges in the last years, even under the previous regime to identify areas of opportunity to improve the relevant procedures and mechanisms, strengthening the engagement with suppliers through the verbal debriefing procedure and maximising civil society participation in public tendering to identify and correct potential deficiencies

in the process and ensure that all stages of the procurement procedures are managed in accordance with the legal framework.

### **Proposals for action**

- Given that PEMEX's GJCA is in charge of substantiating the RR and proposing the collegiate body a draft resolution, it is advisable to implement a rigorous training and certification process for the public officials of this unit. This should help the GJCA to issue robust resolutions to RR.
- The process of implementation of the mechanism of RR should be constantly monitored, assessed, and improved against the principles of justice and timeliness. PEMEX should implement a performance audit programme to assess the timeliness, efficiency, and effectiveness of RR and the training process for the GJCA. Likewise, audits on the legality of the resolutions to RR should be useful to assess how robust such resolutions are and where the opportunities for improvement are.
- PEMEX and its UR should ensure the effective application of sanctions when integrity breaches are identified in the preparation of draft resolutions to RR. Likewise, a Code of Ethics specifically designed for the collegiate body should be prepared to raise awareness about the importance of the objectivity of its decisions. These measures should favour the perceived degree of autonomy of the collegiate body.
- PEMEX should analyse and, if constitutionally feasible, propose amendments to the PEMEX Law to incorporate the possibility of the intervention by default to reduce risks of violation of the principles of legality and fairness. In addition, PEMEX could implement self-correcting actions to identify and provide timely and effective solutions to potential infringements to the procurement legal framework. This could be done, for instance, by increasing civil society participation in public tenders, notably social witnesses.
- PEMEX should facilitate the filing of complaints by those who have witnessed integrity breaches (i.e., public officials and bidders) during procurement procedures. For example, chapter II.1 recommends protecting whistleblowers from retaliatory actions, so that they may feel confident to come forward and report wrongdoing.
- PEMEX and, particularly, DCPA should regularly perform analysis of past challenges so as to identify areas of opportunity to improve procurement procedures. For example, the analysis should identify which stages of procurement procedures are challenged the most and which type of processes are contested more frequently (i.e., national or international public tender, restricted invitation).
- PEMEX should explore ways to increase transparency by publicising in its website (and perhaps others, such as the Transparency Duties Portal or POT) the resolutions on RR, JCA, and *Amparos*, as well as relevant statistics, in a timely and user-friendly manner. A search engine could be available to facilitate finding specific procedures
- DCPA should provide guidelines for procurement officials to know when, where, and how to engage with potential suppliers, as well as the information that can be shared with them. Timely and transparent engagement should mostly be perceived as a preventive measure, but it is also useful to inform the business community about the alternatives available to challenge an award decision.

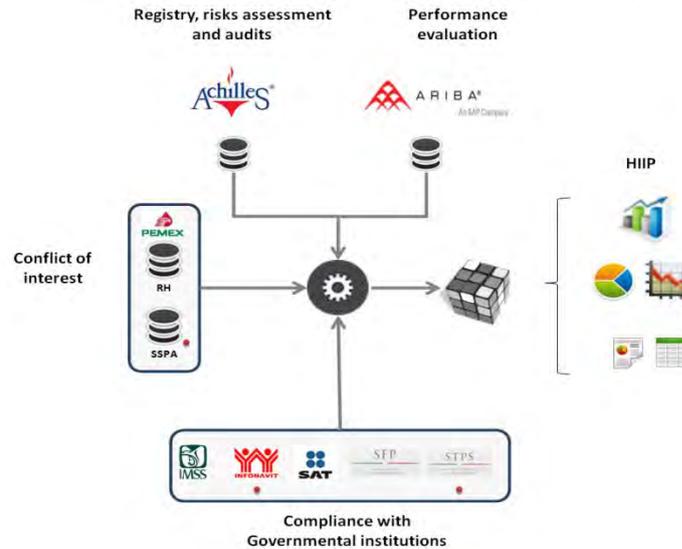
### III - CONNECTING PEMEX'S COMPETENCIES WITH SUPPLIER'S CAPABILITIES FOR A NEW PROCUREMENT

#### Chapter 1. E-procurement: Implementing a strong IT environment to support PEMEX's procurement activities

Use of information and communication technologies in procurement processes is widely considered as a tool with strong potential to deliver major benefits to public and private entities by facilitating access to tenders, increasing competition, decreasing administrative burdens, and improving transparency and accountability of holding public authorities. Electronic public procurement has an established track record of streamlining and accelerating public purchasing, benefiting both public purchasers and suppliers along the way as it allows the search, collection, consolidation, extraction and visualisation of the information required by officials in decision-making, through dashboards and standard reports. The major challenge that PEMEX may face at implementing an e-procurement system is to design, create and integrate electronic platforms to ensure greater efficiency of the process in a user friendly format to achieve its purpose. This chapter made a review of the efforts made by PEMEX with this purpose.

- Each PEMEX subsidiary had developed its own IT system and had its own business processes, different catalogues of products, different encodings for each organisation which have limited the positive impact of digitisation on the efficiency of decisional processes. This situation has impacted in a negative way the overall process efficiencies, economies of scale, rationalisation, and standardisation of procedures across PEMEX.
- Since electronic means of communication are mandatory in regulated procurement procedures, PEMEX has taken many positive steps towards moving the management of procurement in that direction and it is currently using different digital platforms. PEMEX is currently going through a transitional period while at the same time developing and implementing a single end-to-end platform for e-procurement. The procurement system was fairly complex and inefficient in the past when the subsidiaries had the freedom to setup their own procurement systems without any consideration for what another subsidiary was doing.
- PEMEX is making an effort to uniform the automation of procurement by using technology to create common procurement processes, ensure greater transparency and access to important information for the tendering process. PEMEX has developed different platforms (tools) to meet the needs for different stages of the procurement process, such as for category management, electronic catalogues, and registration of suppliers but they are currently not integrated. Some steps have been also taken to their integration and there is a mechanism already in place between ERP (Enterprise Resource Planning System) and *Bóveda Electrónica*, SAP – Ariba and HIIP (*Herramienta Integral de Información de Proveedores*).

**Figure 1.1.- Interconnected system for the registration process.**



- Overall, PEMEX shows a high level of digitisation of processes and information management with a centralised data master system (SAP - Ariba) to keep track of the overall volume of purchases and the list of suppliers. PEMEX main objective throughout this process has been to design a *point to point platform* (end-to-end) that covers all functions, linked to vendors, procurement and planning but it is moving from five systems (ERPs) to a one system platform (SAP – Ariba) supporting all procurement processes. The SAP – Ariba provides support for three transactional systems, PEP, TRI and CORP for the processes of spend analysis, negotiation, contracts and information requirements with suppliers. The unification of the ERPs is only focusing to have the same templates in 3 SAP's. The long term view is to create a system that is (integrated) and managed in the right manner, with a suppliers market actively using the system to support procurement processes, hence being more cost efficient in the long run.
- The procurement process for the harmonized basic platform is SAP – ECC (Enterprise Central Component), which is a modular system combining many areas of the organisation together and allowing communication and interaction of data. It processes a large amounts of data and obtains useful information for decision-making from internal processes like finance, maintenance, commercial and human resources. The procurement process is linked with finance for budget checking, and specific functionality to other processes in relation to the procurement process (e.g. maintenance). SAP - ECC is complemented by other systems to ascertain the whole functionality (e.g. SAP - Ariba for electronic procurement).
- The SAP - ECC system is being improved and supplemented to harmonise for all PEMEX platforms, including the SPyA (*Sistema de Seguimiento de Procura y Abastecimiento*) system for the planning stage, SAP - Ariba cloud solution for e-procurement, RFX and reverse auctions, supplier information and performance management, reverse management contracts and visibility and Documentum for content management.
- PEMEX is no longer actively using Compranet since it launched, in 2015, the e-procurement tool SAP – Ariba. While no data is yet available on the proportion of contracts carried out electronically in November 2016, all contracts must be made with the electronic platform of SAP - Ariba RFX, including reverse auctions and negotiations among others. In the meantime, some PEMEX contractors are still sending and receiving documents by paper.
- Currently three PEMEX's subsidiaries (EPS) are using SAP - ECC to obtain basic information such as purchasing, human resources, accounting, project management, detailed information on procurement

volumes from each supplier and prices and the SPyA platform for planning purposes. While the SAP - ECC system is providing an integrated business environment it is still working on some definitions of transversal processes to achieve the necessary integration. SAP –Ariba has been identified as the platform that will support the electronic procurement processes and electronic exchange of information with suppliers.

- PEMEX subsidiaries have their own electronic platforms named the ERP (Enterprise Resource Planning System) platform that allows the integration of management of internal and external information across the entire organisation and taking decisions online but at the moment that function is not operable.
- During the two year implementation period of this platform, PEMEX has faced many challenges as the low knowledge and skills of information and communications technology (ICT), the low innovative organisational culture and the low knowledge of the economic opportunities raised by e-procurement systems. In addition, from potential bidders and suppliers perspective, the main challenge consist on understanding or applying the procedures and the use of their functionalities.
- The challenges of PEMEX transformation to a state productive company has prolonged the implementation of the end-to-end platform process excessively due to the lack of project support in the execution of the necessary changes, the limited ITC skill of its employees, the low knowledge of the economic opportunities raised by the tool and, in general, the low innovative organizational culture
- Before 2014, the Directory of Suppliers and Contractors (national suppliers) and HITEC (international suppliers) had 10,500 registered suppliers who have migrated to the new SISCEp that contains information of expenditure collected relating to contracts, invoices, category analysis, performance information, market analysis with comparative prices, terms of contract, business scenarios, library of standard clauses, preparatory repository, open contracts, and framework agreements. This solution is in the process of being validated by the suppliers themselves.
- PEMEX recently introduce a new supplier registry managed by Achilles that is servicing the registration and validation of information that suppliers register on two levels. The basic level is for minor contracts (under \$ 200 000 USD) and the extended level for contracts which are greater than the threshold or those that PEMEX deem strategic.
- Achilles is the registration module of HIIP (*Herramienta Integral de Información de Proveedores*) and contemplates an assessment of commercial risk for the extended registration. It provides opportunities to approach additional suppliers through a global network of suppliers from other companies in the oil and gas business as long as they are registered in Achilles first.
- The HIIP is a comprehensive query platform providing data on specific companies for the purpose of identifying trends to assist PEMEX in deciding which suppliers select. It allows consolidation of information from suppliers from different internal and external sources, as well as recording of performance evaluation and reporting of risk, improving the knowledge about suppliers. It is interconnected to Achilles (which functions as it registry) and SAP – Ariba but does not focus in providing statistical information on suppliers.
- The functional interoperability of these three platforms starts with the registration process that takes place on PEMEX website after which the contractor is automatically transferred to the Achilles website. All suppliers and contractors must complete the basic registration, where they will be required to provide generic information about their company, including financial records and administrative information for each event when they participate in the tendering.

- The only internal systems that interface not only with PEMEX procurement officials but also with users are Achilles, SAP- Ariba and HIIP. Suppliers and contractors may be invited to register at the next level (Extended registration) based on the strategic or risk profile of the company, and the amount of contracts it holds with PEMEX.
- With the implementation of this new registration system suppliers keep their registration updated and the PEMEX employee responsible for the tendering process will obtain the vendor information through the management information system. Part of this registry process includes the assessment of previous performance stored on the SAP- Ariba platform and obtained through ERPs (transactional systems) for the purpose of evaluating contract performance and to find key business users that fulfil certain criteria.
- PEMEX interact with potential suppliers through the Relationship with Suppliers and Contractors (RPC), a new route in continued improvement, and PEMEX PASS (Point of Access to Supply System) a specialized tool that is the point of contact and assistance to suppliers, contractors, and users of PEMEX. PEMEX PASS provides assistance to the companies that approach PEMEX, route offers to user areas, and give an understanding of the market. It also offers information on how to register online and upload necessary documents (Supplier Registration), it is also a guide (Supplier Development) so that potential suppliers know the needs the company has, concerning goods, equipment, services, supplies, etc.
- The SAP-Ariba is run by “*Gerencia de Mejora del Proceso, Integración y Catálogo*”, belonging to the DCPA, and includes users and templates for business scenarios, with the objective to contribute to the systematisation of strategic tendering and category management, with a comprehensive supplier management, expenditure analysis, strategic negotiation, and model contracts. The system and services is maintained on a Cloud based solution, both for internal PEMEX users and for suppliers.
- Information on spending visibility is loaded periodically by PEMEX administrator of the Spend Visibility Module and is enriched and deployed by SAP – Ariba personnel. Information on particular contracting processes is uploaded by PEMEX suppliers and a reporting module with around 200 established reports exists.
- The SAP-Ariba platform offers certain services designed to meet the following stages of strategic tendering such as creation of projects and supplier evaluation; search and identification of suppliers in the Global platform of Ariba related to goods and / or services of particular requirements; visualisation and analysis of spending in different dimensions. Procurement officials control access to SAP by creating individual user names and passwords. The access to each individual tendering project is controlled by the owner of each specific project who can make changes. Other participants can only execute the assigned tasks. The completeness and quality of data entered by potential contractors is secured by SAP – Ariba. by configuring fields, formats, and the capture of information that allow potential contractors to continue capturing further information.
- Currently SAP – Ariba is not linked to other systems but PEMEX plans to link it up to the Planning System (SPyA) (*Sistema de Seguimiento de Procura y Abastecimiento*) to the ERP for the creation of the purchase requisition and to create contracts for the execution. The future plan envisages inclusion of complementary systems and the corresponding links, to complete the whole landscape.
- The efficiency of the procurement process has significantly increased with the incorporation of the SAP- Ariba solution using standard templates, documents and approved procedures and reference times for each activity. SAP-Ariba allows the participation of a "Social Witness" in supply projects, in accordance with federal regulation and each activity in the system automatically creates audit trails for full traceability, increasing transparency.

- To ensure the ability of PEMEX staff to use SAP - Ariba in electronic trading and to support procurement processes, a program called "training of trainers" has been developed to identify, select and train a group of people who will be trainers for the entire company. Additionally, a program named "*On Boarding Program Provider*" has been deployed in addition to the help desk scheme and documentation available online for PEMEX personnel.
- After realizing this lack of interconnectivity and standards for processes between the systems were not ideal, PEMEX is now implementing a centralised support system to three ERPs with SAP-Ariba for specific processes of the procurement cycle leading to more cost efficiency in the long run. PEMEX objective is to create a framework incorporating several platforms that are all integrated with a high level of interoperability. As the system is under development, PEMEX should recognised the importance of developing key performance indicators that can be derived from information available from within SAP - Ariba and other related systems.
- Ensuring appropriate management and skills is crucial, both in terms of ensuring continued and effective service and in achieving the right balance between contractors support and internal capabilities to manage the system.
- The main e-procurement system is the new SAP – Ariba that incorporates all the main stages of the procurement process,. The Portal of PEMEX and Achilles is used for supplier’s registration, performance assessment, and audit findings. In addition to these platforms, there is a planning and budgeting system which plays a crucial part within ICT procurement namely SPyA. The SPyA system is designed to store information about future needs. Its objective is to integrate information on planning, processes, and contract management into a corporate database and works as a living platform where resources can move between projects and tasks can be reprioritized. The functionalities of the system are that from April –June procurement officials can register data and information about projects onto the database for the forthcoming year. Several key issues need to be taken into consideration when registering the projects, for example, who made the contracting request, location of work, results from market studies, planning and invitation of tenders.
- The SPyA is not only a planning tool, up to date information on the progress of a project is supposed to be uploaded on to the platform which is capable of issuing progress reports quarterly but it is not yet interconnected with Achilles, SAP-Ariba, or HIIP.
- Despite wide range of functions, PEMEX needs to further enhance the integration of the e-procurement system to become leader in terms of scope and coverage, even when compared to other OECD country systems.
- PEMEX system will be missing the ordering option linked to the incorporation of framework agreements. However, with *Bóveda Electrónica* and SAP – Ariba functions, such as electronic submission of invoices and ex-post contract management, there will be additional tools within the e-procurement framework.

### **Proposals for Action**

- Have a clear vision for change from the senior management of PEMEX and ensure that they fully support the development of the e-procurement given the complex network of connections between e-procurement platforms. Consulting key stakeholders should also be at the forefront of any change management strategy.
- Increase the integration and interoperability of SAP – Ariba, SPyA and HIIP as it could help secure the benefits of the new investment taking into account the identified limitations.

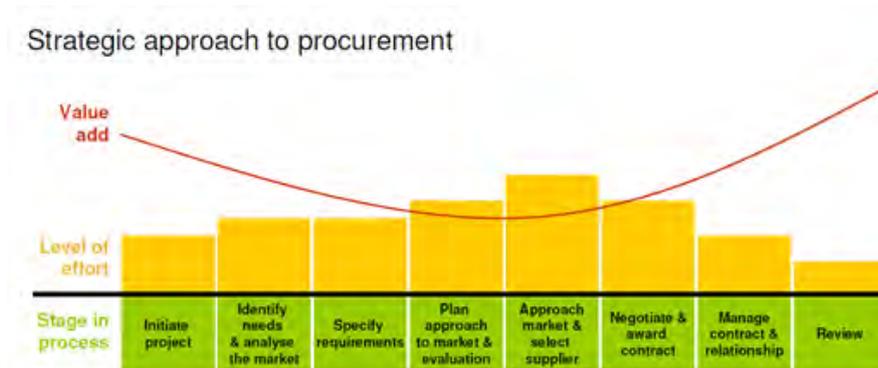
- Develop a strategic approach to ensure the presence of the right level of capacities across the whole PEMEX where the levels of sophistication in the use of ICT to support public procurement processes vary greatly.
- Consider integration of audit findings for the development of training activities, to better incorporate lessons learned which could potentially lead to better targeting of training resources.
- Consider leveraging the deployment of SAP – Ariba as an opportunity to level the strategic capacity and skills across the various subsidiaries.
- It is important that the employees grasp the potential of the different e-platforms and how to take advantage of economic opportunities raised by these tools.
- Improve the management of data and information with HIIP across the whole PEMEX to support the pooling of homogenous needs for the achievement of economies of scale.
- The DOPA needs to continue playing a leading role in developing and using tools to improve procedures, reducing duplication and achieve greater value for money, including centralised purchasing, framework agreements, e-catalogues.
- Regularly evaluate the performance of the system by gathering qualitative data through satisfaction surveys from users. This will provide PEMEX with a wide variety of suggestions for improvements and whether customers are satisfied with the overall system.
- Set up a call centre and ensure the ability of the call centre to address technical questions from end-user buyers and suppliers. Make sure that the call centre is capable of addressing questions that are directed to matters beyond the function of the e-procurement system.
- To further achieve the full potential of the procurement system, PEMEX should consider setting up an Online Shopping Mall with specific search functionalities, including, for example, social objectives,
- Ensure that transparency is provided through the collection and publication of procurement information. Make sure that access for vendors and other stakeholders is assured not only through standardised and simplified processes, but also through regular trainings and the availability of a help desk that is readily available to answer questions about the use of the system,
- Deliver clear and integrated tender documentation, standardised where possible and proportionate to the need;
- Consider implementing tools that help ensure that the extent and complexity of information required in tender documentation and the time allotted for suppliers to respond is proportionate to the size and complexity of the procurement
- By allowing the application of oversight and control mechanisms to support accountability throughout the public procurement cycle complaints from suppliers need to be tracked from within the SAP - Ariba, and the outcome made publicly available.
- Improve tenders search functionality for suppliers through a progressive filtering option to narrow down open tenders by type, requirements for social category etc. to help them to identify relevant tender opportunities.
- Ensure that procurement data is collected in a centralised manner eliminating the need for manual transmission and entry of statistics to satisfy reporting requirements. By building on this improved centralised data, PEMEX should consider developing procurement metrics and indicators to monitor the health and efficiency of the procurement system.

## Chapter 2. Revising PEMEX’s pre-solicitation activities for a stronger procurement function

While the DCPA defines and develops centralised processes and strategies, procurement operations are carried out by decentralised business units. To ensure that this centre-led model indeed reaps the benefits of this procurement structure, greater attention and strategic efforts should be placed in pre-solicitation activities. They indeed supports and often shape how procurement operations are carried out and have the potential to transform the positioning of the DCPA within PEMEX, from an intermediary to a strategic enabler.

- As pre-solicitation activities, both internal and external, could pave the way to develop a stronger procurement function strategically interacting with business units and suppliers, the DCPA should move away from a middle-man or interface role to an enabling role.
- Procurement planning is not only important to ensure coordinated and efficient procurement operations but helps to reduce undue recourse to emergency procurement and direct award. Defining purchasing synergies in a decentralised business environment is a challenge to which governments and large companies alike are often confronted to. Beyond gathering and structuring procurement needs, PEMEX and its subsidiary productive companies need to set up a robust procurement planning exercise as is the primary function that sets the stage for subsequent procurement activities and provide for additional opportunities to create and maximise value of procurement operations.

**Figure 2.1.- Strategic approach to procurement**



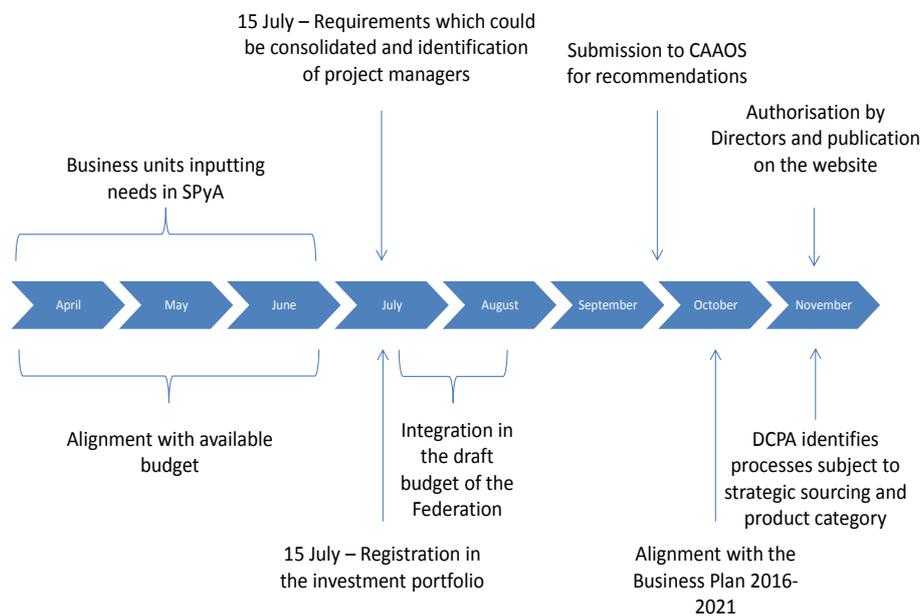
Source: Mastering procurement, a structured approach to strategic procurement, 2011

- Centralised PEMEX procurement processes and strategies requires an exhaustive, structured and accurate needs assessment maximizing internal efficiencies and identifying external synergies. PEMEX needs are integrated into a consolidated *Annual Program of Acquisitions, Leases, Public Works and Services (Programa Anual de Adquisiciones, Arrendamientos, Obras y Servicios, PAAAOS)*, prepared jointly by the business units and the DCPA, in which a general description of acquisitions, leases, public works and services intended to be procured during the fiscal year with their estimated amounts for each year and projects is provided. PEMEX procurement plan however does not provide longer-term information about future procurement needs, extrapolating from past procurement expenditure.
- The procurement planning process formally starts in April of the preceding year where all business units are required to input their procurement requirement to the DCPA through a procurement planning tool, the SPyA, by 30 June and are subject to budget availability. They are assessed against the company strategic objectives previously analysed the DCPA. Once approved, procurement needs are

integrated in PEMEX budget which is submitted in the draft budget of the Federation prepared by the Ministry of Finance and Public Credit (*Secretaría de Hacienda y Crédito Público, SHCP*) and proposed to the Congress in September.

- Providing strategic oversight on procurement strategies and operations, the procurement plan is then submitted to the Committee of Acquisitions, Leases, Works and Services (*Comité de Adquisiciones, Arrendamientos, Obras y Servicios, CAAOS*) for recommendations. At the end of the process, the PAAOS is authorised by the Director General of the subsidiary productive company and the Director of the DCPA and, in the case of PEMEX, by its directors and the Director of the DCPA. The PAAOS shall be issued and published on PEMEX website no later than 15 November of the preceding year. Yet, it does not include information on future procurement opportunities with PPI or PMI albeit representing a significant share of the group’s procurement activities.

**Figure 2.2.-Procurement Planning Process in PEMEX**



**2016**

Source: Adapted from PEMEX

- This strategic tool will only participate to increase procurement operations’ efficiency if it goes beyond reflecting procurement needs analysis and allows for needs management on a regular basis. Indeed the PAAOS serves as a route map for procurement operations carried out throughout the year but in practice is not capturing all procurement forecasts information with a large amount of unplanned procurement process which questions not only the exhaustiveness but also the efficiency of the agreed plan.
- Besides contributing the management procurement needs throughout the year, the plan could serve to raise awareness among the suppliers’ community. However, its static format does not allow for dynamic searches of future business opportunities, preventing suppliers to easily access to information that they might be interested in.
- PEMEX website is meant to disclose more detailed information about upcoming open tenders in the month to come as a mean to further raise awareness among suppliers and help them in assessing their

capacity to respond to the advertised needs. Yet, this communication channel is hindered by the absence of regular updates of information disclosed rendering it partial and sometimes obsolete.

- Another mean to increase suppliers' understanding of PEMEX business objectives requires physical interactions either in specialised fairs or in dedicated events organised directly by PEMEX. Having participated in the recent months to such fairs, PEMEX would benefit from developing further this type of suppliers' early engagement and structure interactions so as to frame future tenders in accordance with market capabilities.
- In addition to communicating on aggregated procurement information, PEMEX could further reinforce pre-solicitation activities on specific procurement projects as to maximise value creation and develop clear and effective requirements before formally soliciting suppliers with the issuance of tenders. By defining the scope of competition tender documentation plays indeed a strategic role in shaping the outcomes of procurement processes. While PEMEX business units have an undisputed technical knowledge of outsourced goods and services, they might lack a procurement understanding in drafting technical specifications.
- Support or template designed by procurement experts in the DCPA could help business units when drafting technical specifications to ensure they are logically structured and clear enough to ensure a good understanding of the needs.
- Yet besides the drafting of the tender documentation, the structure of tenders and assessment mechanisms of offers are hindering competition and the identification of proposals offering the best value for money. Indeed, technical components of proposals are assessed on a pass or fail basis, which does not incentivise suppliers to compete beyond minimum requirements and therefore reduce the potential for innovative solutions.
- As a result PEMEX is locked in contracts with old technologies and do not benefit from innovative solutions to respond to the complexity of oil and gas procurement projects. Innovation can only be fostered in PEMEX's procurement processes with a favourable framework. While having the potential to create additional value with the identification of alternative technical solutions, leveraging on public procurement to foster innovation is a complex process and could have a negative impact if not cautiously carried out.

### ***Proposals for Action:***

- While the DCPA defines and develops centralised procurement processes and strategies, it needs to place greater attention and strategic efforts to presolicitation activities such as developing a procurement plan capturing procurement needs of the entire PEMEX group, including its subsidiaries.
- Systematically analysing past procurement expenditures provides strategic insights to inform future procurement decisions and would help PEMEX in developing more accurate estimates and assess needs against available budget;
- PEMEX could expand procurement plans beyond needs for the next calendar year so as to provide suppliers with longer-term visibility and to develop internal strategic spend management;
- PEMEX could implement regular assessments of its procurement plan efficiency notably by defining indicators relating to its effective coverage against actual procurement expenditures;
- Developing dynamic procurement plans allowing for identification of specific future procurement opportunities according to suppliers' areas of interest would help raising awareness amongst the private

sector on procurement processes in which they estimate being in a position to bring value-added to PEMEX.

- PEMEX should ensure that its website provides structured and harmonised information on the various steps of its procurement processes and notably on the pre-solicitation phase to provide suppliers with a greater understanding of the group structure and business opportunities.
- In order to reduce asymmetry of information and to create an environment conducive to strategic relationships with its suppliers, PEMEX could further develop targeted events either communicating on aggregated procurement plans or discussing specific procurement projects;
- To ensure that expression of needs correspond to market capabilities and foster competition, the DCPA could develop guidance and templates to support business units developing technical specifications;
- PEMEX could disseminate more systematically draft tender documentation before the issuance of the procurement process so as to benefit from the industry perspective when defining technical requirements;
- PEMEX could consider revising its Procurement Guidelines and Manuals to allow for a comparative assessment of technical merits of the proposals submitted by bidders rather than evaluating them on a pass or fail basis to unlock the technical innovation potential of the industry;
- PEMEX could define policies and guidance on the development of performance-based specifications allowing suppliers to propose technically competing solutions. To leverage on public procurement to foster innovation, PEMEX should reinforce in large procurement projects early exchanges with suppliers while ensuring fairness and transparency in the selection process;
- PEMEX could define specific risk management strategies to mitigate potential disruptive effects of innovation so that projects adequately deliver their expected outcomes.

### Chapter 3. Increasing efficiency and fairness in the solicitation and contract award process of PEMEX

This chapter looks at the results of reforms and strategies implemented in recent years to make the procurement system, processes, and procedures more efficient. The market environment in which PEMEX works has been transformed and the company is now forced to take steps as it enters a much more competitive market. Part of that process is to identify good practices of supplier engagement, since in Mexico excessive controls and a legalistic culture make it difficult to engage with suppliers for consultation and development purposes.

- PEMEX has identified an appropriate procurement strategy to develop solicitation documents, terms of the contract models, and how offers will be evaluated to select the winning bidder(s) based on the new methodology for defining its strategies for the acquisition of goods and service “Strategic Supply and Management by Categories” (“*Abastecimiento estratégico y gestión por categorías*”).
- However, during the solicitation process PEMEX need to provide clarifications to bidders including any resulting changes changes to the solicitation documents; the receipt and evaluation of the offers in strict adherence with the process and criteria established in the solicitation; the award results and debrief unsuccessful bidders.
- PEMEX contracting strategies foresee to satisfy the supply needs while getting the best deal in terms of value for money, optimise, streamline, and better manage available resources, by business orientation, process improvement, and integration. It also looks for planning and executing in less time with an approved centralised process, and implementing contracting strategies supported by the methodology of strategic supply and category management of products.
- The DCPA strategies on procurement include preparatory contracts made by direct awarding and involved an justified exception from the open tendering procedures, framework agreements and categorisation of products centrally that allows PEMEX to simplify its procurement processes and make them more efficient by defining a contracting strategy for the whole category of products.
- PEMEX has elaborated preparatory contracts under which a supplier or contractor establishes a unilateral promise or exclusive rights of sale to supply to PEMEX, if requested, goods, services, leases or works but did not impose to PEMEX a volume or value of goods or services to be acquired. These preparatory contracts have the objective of ensuring the best conditions of purchase for PEMEX relating to substantive productive activities through competitive, open, and transparent processes. By doing so, PEMEX is looking for moving to a *product management* as a process for maximising the economic value of contracts and reduce costs through new and better conditions. PEMEX has also established a procurement model based on centralisation that should maximise the use of purchasing power of PEMEX to generate value and optimise the resources of DCPA to increase productivity and efficiency of the procurement process, by creating multidisciplinary teams in regional representations, called Centres for Procurement and Supply (*Centros de Atención de Procura y Abastecimiento*, CAPAS), which have the function of being an executor of the process.
- As a result of an effort to standardise and simplify its procurement process, PEMEX has developed prototypes of solicitation documents in various forms for open competition, restricted invitation, and direct award.

- The *General Guidelines for Procurement and Supply* sets out that the model contracts are included in the information with the solicitation documents for open competition or restricted invitation, as well as the submission of an offer for direct awards. The type of model contracts and the clauses for contracts are prepared beforehand by PEMEX Legal Department considering the provisions of contracts and indicates the type of contract, the identified risks linked to the project, processes and execution of the contract, prevention and mitigation, the concentration of contracts in a single supplier and scale and complexity of the object of the contract. The legal department also provides DCPA with an ad hoc tendering model in line with the strategic sourcing within a reasonable time prior to the start of the procurement process. Once the contract is awarded, the DCPA customises the draft contract with the data which the contractor or supplier sends to the DCPA accompanied by supporting documentation for it to conduct a legal review and proceed with the processing.
- The average opening period of public tenders (from the issuance of the tender notice until the deadline for responses) varies depending on whether the tender is national, international or restricted.

**Figure 3.1.- Average tendering days per type of tender for the year 2014 and first half of 2015**

Type	Average tendering period (days)
National public tendering	49
International public tendering	66
International public tendering according to treaties	65
Restricted tendering with less than three suppliers	25

- PEMEX has been successfully using the technical platform of registered vendors to identify potential suppliers for market analysis and sending RFIs to specifically selected suppliers and PEMEX PASS that allows suppliers, contractors and users of PEMEX areas to find and identify business opportunities; target small, medium and large suppliers or contractors that have already a business relationship with PEMEX, or are interested in starting a relationship.
- PEMEX has also an Audit Program with third party auditors carrying out independent audits of strategically important vendors to inform suppliers about compliance issues important for PEMEX. Suppliers are chosen based on a risk management scheme which is very closely linked to the value chain and may also be invited to a face to face meeting to explain them the mechanics and scope of the audit. The audit mechanism is not used to validate data in Achilles but more to identify certain suppliers as critical vendors. The outcome of the audit is shared with supplier as a tool for continuous improvement and with internal areas as part of a due diligence assessment.
- Despite improvements observed, PEMEX needs to continue working on advancing symmetry of information on technical specifications and requirements for participation in the procurement process for all suppliers to ensure equal opportunity and fairness. Technical specifications and calls for tender require more attention in terms of equity while a significant majority of suppliers perceive PEMEX to be a fair company in the tendering process.
- Before reaching the clarification stage, PEMEX has implemented a recruitment process for suppliers that works as prequalification stage where it explains to all suppliers the rules of the game and assesses the ability of potential suppliers to deliver a certain product.
- PEMEX can have one or a series of meetings for clarification in a tender process based on the need of participants who expressed their interest in participating in procedure for tender through a *Manifiesto*

*de interés*. All questions and answers submitted in relation to the bidding process which includes clarifications meetings with potential contractors are now published.

- Clarification meetings are held at PEMEX offices and normally all interested parties are invited to participate in the clarification meeting at the same time. Technical clarifications are performed in accordance with the current regulations and are carried out during the clarification meetings and are kept tracked in the records at the end of the meetings.
- There is no legal obligation for PEMEX to hold a minimum of one clarification meeting for public tendering which is determined by PEMEX in relation to the complexity of the matter and its procurement procedures that set the stage for clarification of a tender (Open Competition and Restricted Invitation). Issues raised in a clarification meeting are resolved in face to face meetings or by email option, where the representative of the company sends its queries to the server *Procura* which presides over the tendering procedures. PEMEX answer the queries in the same way they were received and publishes the answers online.
- There are also other channels established by the SDRPC (*Subdirección de Desarrollo y Relación con Proveedores y Contratistas*), like the PEMEX PASS for suppliers to seek advice or request for general information about tenders. PEMEX has relied to a limited extent on electronic channels to correspond on contracts clarification. PEMEX has recently started using the *Procura* solution with SAP-Ariba for electronic exchange of information through RFX, including technical clarifications and prequalification of suppliers.
- The possibility that a potential provider is not satisfied with clarification has been reduced since several meetings of clarification can be held where they have opportunity to rethink their questions and discuss matters with PEMEX officials. In case of being unsatisfied with the answer received, the contractor can send a complaint to the Internal Audit of PEMEX which is invited to all clarification meetings where it is allowed to interact and even communicate to the PEMEX officials.
- PEMEX current procurement framework requires that solicitation documents mention the specific criteria for the evaluation of the proposals and selection of the winning bidder as it is a particularly vulnerable step of the procurement process. These criteria need to be directly linked to the requirement, be as objective as possible and not favour a particular supplier, clearly identified in the solicitation document, and the evaluation must entirely adhere to them.
- According to reports by CORP, PEP, PPQ, REF and PGPB, issues have been raised regarding breaches of that crucial principle within PEMEX, as the evaluations are not always held in accordance with the criteria and requirements specified in the solicitations. This creates risks for PEMEX and reduces the number of proposals under the system as it may be perceived tainted.
- In the case of high-value contracts, bid evaluation could also take the form of an ex-ante audit prior the decision is made, where all evaluators sign their evaluation reports (technical, economic and commercial) and the final bid evaluations are collected in a final document detailing the chronology of the procurement procedure, including assessments from start to the end.
- Prior to the awarding of a contract, a process of verification of the report is carried out jointly by those involved in the evaluation process, the Procurement Management, Cost Engineering Management and Market Analysis and the project manager. The use of automated systems, such as the *Integral Technology Platform*, could provide opportunities to increase compliance with the established solicitation rules, facilitate the exchange of information, improve process efficiency and increase transparency, but compliance with the tendering rules depends entirely on the participants and the evaluators.

- The DCPA has developed several guiding documents for the use of the binary method of evaluation as the award criteria, among which is the virtual course entitled "*Methods of Evaluation of Proposals* " that describes different criteria and cases, procedures for application, and how it is possible to develop precise criteria according to each situation. It has also instructed that courses will be held for staff regarding the use and application of such criteria.
- The DCPA declares in writing whether a bid is unsuccessful (open competition) or successful (in restricted invitation) to the participants who submitted a proposal. The result of the tender will be also announced through the internet portal area *Procurement and Supply*, and include only the name or names of bidders and the contract amount. PEMEX provides to tenders a customised information about what will be assessed, what needs to be presented and how they are going to determine the winner requirement and in the hands of each specific procurement area to determine.
- The technical evaluation based on the binary approach is made by the project manager but a group of technicians, sometimes up to ten people, are in charge of the evaluation process. In the current system, the evaluation criteria used is the method of binary evaluation based on the *General Provisions of Contract for Petróleos Mexicanos* and Subsidiary Companies which consists in two phases. The first using only mandatory requirements to narrow the field of bidders. The second stage can include several awarding criteria. By using the binary system PEMEX needs a high level capacity among employees and is not incentivising companies to come up with new solutions during the bidding approach.
- The number of employees participating in the evaluation phase depends on the type of procurement (goods, services, works, etc.) as well as its complexity. For public works it can be various specialists, such as civil, structural, process, piping, etc., that require a larger team to conduct evaluations. The documentation of evaluations is carried out in accordance with the General Provisions for Contracting of PEMEX using a template.
- The new procurement framework does not provide legal obligations limiting the possibility of a standstill period to allow suppliers to challenge the decision. However, while its terms should be indicated in the documentation for the formalisation of the contract as it is part of the contractual terms, this period is not fixed between the date bidders are notified of the contract award decision and the date they can enter into the contract. This practice promotes fairness and integrity of the procedure by given sufficient time for bidders to use existing remedies and permitting the suspension and annulment of the decision at a stage where the infringement can still be rectified or its impacts minimised. PEMEX should consider implementing it for a minimum of six working days, i.e. the period available to bidders to raise claims against the award ("fallo"), and a maximum of 15 calendar days, maximum time allowed by law to sign and issue the contract when not otherwise specified in the solicitation document.
- PEMEX has no regulatory framework neither procedures for debriefing bidders and meetings with suppliers. Generally, debriefings are provided in writing to contractors but it could take place orally at the request of participants. Clarifications are however provided in writing for general knowledge of the participants and published on the PEMEX website.
- While there is no legal obligation to provide feedback to tenders neither to provide information on non compliance, PEMEX's procurement units do provide in writing the elements of non-compliance at the request of companies that approach PEMEX officials. The information given to unsuccessful tenders depends on the particular contract, but PEMEX could give a broad indication of the results. Procurement units of PEMEX are actually only in writing the elements of non-compliance. Implementing an adequate debriefing will provide PEMEX with a valuable opportunity to gain benefit from the process and therefore should develop guidelines creating a clear framework for that activity.

### *Proposals for Action:*

- Enhance the adequacy, clarity and quality of the solicitation documents and requirement specifications by implementing supporting tools and documents (such as checklists, best practices, templates and a regularly updated catalogue of authorised goods) as well as necessary training.
- PEMEX should consider using other methods than binary for technical specification, such as approaches that include comparative assessment of bidders which are more likely to incentivise companies to come up with new solutions during the bidding approach.
- The requirements at the pre-qualification level can be too strict leading to certain companies being prematurely excluded from the procurement process. Certain requirements for certification from other countries is likely to exclude Mexican contractors participating in tenders.
- There is an urgent need to look more at life cycle cost in the economic assessment and not only apply the lowest cost win model.
- PEMEX should respect the time needed for preparing proposals, asking for quotes with fixed prices with no adjustment in prices can lead to higher offers. It is important to include adjustment clauses in the contracts.
- Ensuring that clear and complete answers is provided to all valid questions raised by potential bidders and provide answers electronically through PEMEX website, to the extent permitted by the legislation, and holding clarification meetings only to the extent necessary or required by law.
- Improve the efficiency and adequacy of the evaluation and selection process by implementing a mandatory review process for all solicitations, taking into account the value and risk of the requirements. For that purpose, a dedicated quality assurance unit could be created and used for larger or more sensitive requirements.
- Mandating that solicitation documents are modified immediately after each clarification meeting to reflect changes agreed upon. These should be issued with the meeting minutes.
- Requiring all technical evaluators to sign a “Evaluation Code of Conduct” clearly spelling their obligations, the evaluation process to be followed, and the criteria to be considered.
- Creating a clear framework, as well as checks and balances for the evaluation of proposals and determination of the winning bidder through the automatization of various associated activities (as described before).
- Implementing a mandatory standstill period of a minimum of six working days and a maximum of 15 calendar days between the date bidders are notified of the contract award decision and the date of entry into the contract, as to allow sufficient time for bidders to exercise available remedies and challenge the decision.
- Holding verbal debriefings (either by telephone or face-to-face), making them part of the company’s formal communication policy. PEMEX should support that activity with clear guidelines that provide a structured framework, and clarify elements such as when and where debriefings take place, what information can and cannot be provided, and the standard discussion structure to be followed.

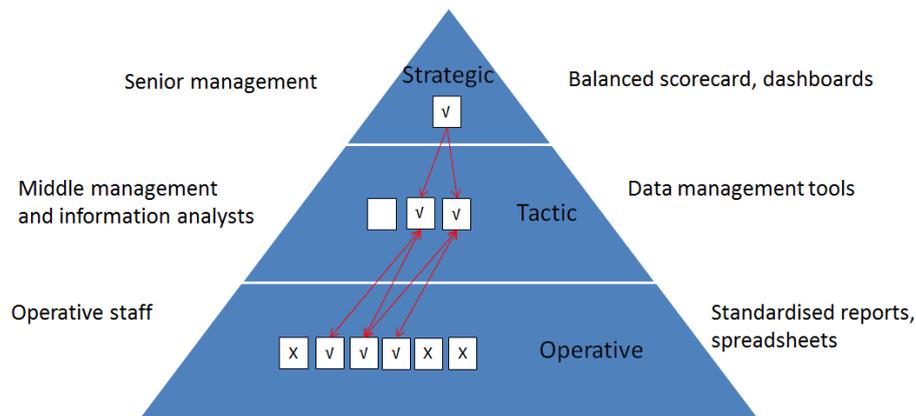
## Chapter 4. Procurement data and performance management system: Towards evidence-based decision making in PEMEX public procurement

Measuring procurement performance calls for an analysis of a series of indicators that may be compared to observe differences leading to decision making. Developing a robust evaluation model allowing a comprehensive assessment of PEMEX business model for procurement and supply requires reviewing reports, management and indicators considering the new regulatory and organisational frameworks of PEMEX, updating data extraction and management, as well as other actions oriented to make effective procurement decisions.

An adequate monitoring of supplier performance is critical to facilitate the effectiveness of procurement strategies as it anticipates, identifies and corrects failures before relationships with suppliers suffer and the optimal use of resources is jeopardised. It also allows risks management based on the historic performance of suppliers and may provide incentives for good performance.

- The Unit for management and evaluation of the business model (*Gerencia de Gestión y Evaluación del Modelo de Negocio*) is responsible for developing and implementing the evaluation model for PEMEX procurement. Currently, the DCPA is reviewing corporate indicators and good practices to determine which ones will be incorporated into the evaluation model.
- The DCPA developed dashboards to monitor procurement performance and give senior management a wide perspective of the procurement cycle. These dashboards are currently under review but their indicators are illustrative of the elements of the evaluation model, among others, acquisitions annual programme, progress with such annual programme, status of order requests, reconsideration requests, uncontested procedures, contracts and suppliers, compliance with procurement times, saving strategies, best practices and SME participation.
- The DCPA launched a pilot to measure efficiency in the procurement process and customer satisfaction by calculating the time taken in each stage of procurement procedures, based on a timeline designed for category implementation. A generic template in the SAPRE (*Solución de arranque para la procura estratégica*) system includes information on stages, tasks, responsible unit, and time for each activity. The estimated time length for each activity is then measured against a standard to be defined by DCPA, considering the applicable regulations, and as established in the calls for tender.

**Figure 4.1.- Data flow for the operative, tactic, and strategic dimensions of PEMEX**



Source: Information provided by PEMEX.

- PEMEX data management is currently carried out through different electronic platforms that are not interconnected but the company is working on developing a centralised procurement data system that will allow to design procurement metrics and improve the ones envisioned for the evaluation model.
- While currently DCPA is carrying out surveys applied during the opening of biddings to get to know the opinions of participants on the transparency of the procurement processes and identify areas of opportunity, such surveys are not made through electronic means. PEMEX applies perception surveys both internally and externally and the results are reported to PEMEX's Commission for sectorial coordination of the procurement macro-function for transparency and anti-corruption (*Comisión de Coordinación Sectorial de la Macrofunción de Adquisiciones para la Transparencia y el Combate a la Corrupción*).
- PEMEX and its subsidiaries have developed a system with detailed public information about their suppliers and contractors. It is updated periodically and incorporates information for the last five years on contracts and compliance. This platform named the *System of public information on suppliers and contractors (Sistema de Información Pública de Proveedores y Contratistas, SIPPC)* collects information from suppliers and contractors, but it is not used for prequalification purposes.
- The SIPPC is currently an excel spreadsheet with incomplete data on suppliers and contracts, not a system. Its information is incomplete because the registration in SIPPC is not mandatory and most contracts were subscribed before the new regulations entered into force.
- PEMEX's supplier performance is measured on a permanent basis through indicators in SIPPC and through performance surveys applied to project managers in the different business units of PEMEX. Depending on the contract characteristics, the evaluation can take place at its completion, in the case of short-term contracts, or periodically in the cases of medium or long-term contracts. PEMEX could use information on poor historic performance to avoid those suppliers getting more contracts and, particularly, to avoid inviting them to restricted tenders or consider them for direct awards.
- PEMEX Procurement International Inc. (PPI) carries out every four months an evaluation for each supplier who has participated in any procurement activities. Such evaluations are based on specific criteria, such as best price, on-time delivery, quality, and customer service.

- PEMEX (and PPI) could consider a Pareto strategy to manage supplier performance. For example, an analysis of contracts and spending would identify critical suppliers (i.e., those with the highest amounts of sales to PEMEX or those who supply important materials or equipment), whose performance is decisive for the efficiency of PEMEX operations.
- To identify critical performance areas, including the results expected and risks to be mitigated, PEMEX should look at contracts and performance by suppliers in the past, as well as, analyse the main sources of obstacles. It also involved identifying objective KPIs, the methodology to be used to collect data and calculate performance results for each KPI through a structured, fair, and transparent dialogue with suppliers.
- While several methods exist to define who is in the best position to monitor supplier performance, the right mix is based on needs, risks, and specific features to be used. Performance reports are periodically carried out jointly by PEMEX and its suppliers, as established in contracts and results are timely put into practice. These reports are useful not only for record purposes, but also to assess performance against objectives and duties as established in contracts and to proactively identify emerging issues and as the basis for subsequent interactions with suppliers.
- Constant communication with suppliers through periodic meetings to analyse performance can also help identify emerging problems and increase supplier participation. Any deficiency observed should be informed to the suppliers as soon as possible so that they can take timely corrective measures to comply. However, supplier performance management can only be effective if PEMEX applies comprehensively and systematically contractual provisions.
- The implementation of a modern and comprehensive system for supplier performance management will allow PEMEX to establish specific objectives and standards of acceptable performance in order to maximise the benefits of a specific contract and minimise the main risks.
- Using previous performance records requires a gradual implementation consisting in completing information in the SIPPC, defining KPIs for evaluation and determining its use as part of the official award criteria. When designing the strategy, special attention should be paid to evaluate suppliers on the same basis, according to their respective contracts and through time and apply previous performance assessments that are relevant only. The use of previous performance as award criteria implies that PEMEX will apply it in all subsequent calls for tender, avoiding it to become an obstacle for entry of new suppliers.

### ***Proposals for Action***

- Complete the design of the evaluation model of PEMEX procurement function, including KPIs to measure the primary objective of value for money, as well as the achievement of secondary policy objectives, such as SME participation and environmental performance, among others. KPIs should allow time comparisons to assess progress.
- Ensure that procurement data is collected through a centralised system that eliminates the need for manual transmission and only accessible for procurement officials and senior managers based on the scope of their responsibilities. To be useful this data should be displayed on dashboards with a user-friendly visualisation scheme, which in some cases could even be open to the public.
- Maintain the use of internal and external perception surveys of the procurement processes online and confidentially.
- Upgrade and complete the supplier information to be recorded in SIPPC, as well as its functionalities to ensure its usefulness, comprehensiveness and accuracy of the information recorded which could be used for prequalification purposes.

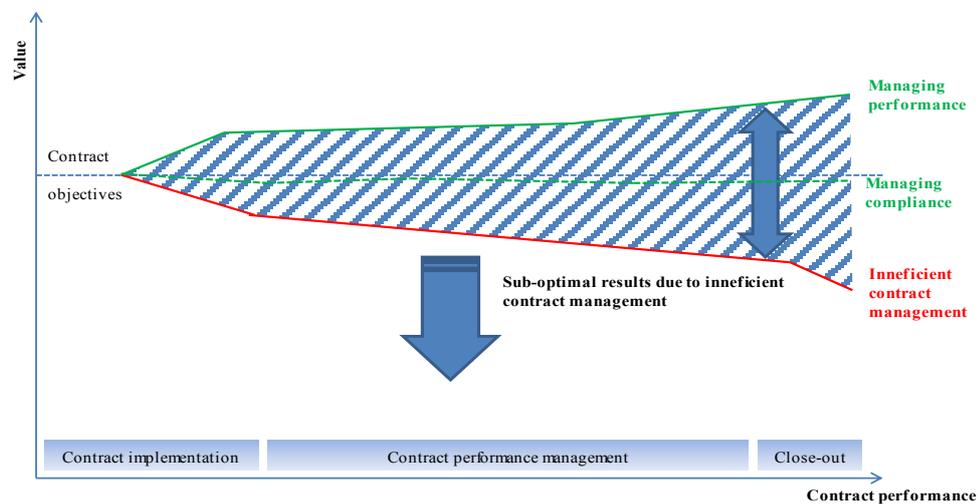
- Consider the KPIs used by other oil and gas companies to review the comprehensiveness of the SIPP. Consult suppliers and business chambers when carrying out such review.
- Leverage on the experience of PPI assessing the performance of suppliers and pool expertise with its officials to develop a “whole-of-PEMEX” model.
- Communicate widely the supplier performance assessment programme to suppliers, making sure they understand what is expected from them and consult suppliers when possible to address the gaps that the system still has and involve the Institutional Internal Control Unit (*Unidad de Control Interno Institucional*, UCII) in the discussions.
- Implement performance improvement plans for suppliers who have repetitively failed to meet PEMEX standards and specifications prior amendment to regulations to incorporate this figure and establish that suppliers unable to demonstrate improved performance may be at a disadvantage in future tenders (i.e., by assigning a low score for poor past performance).
- Ensure the implementation of positive incentives for suppliers with an outstanding performance by, first, reviewing the regulatory framework and then establish clear criteria to use incentives (i.e., savings, innovation, timely delivery). Under no circumstances this decision should be left to discretion and should be taken by a group of officials, not a single one. Positive incentives could include exemptions from the requirement of providing a guarantee, reward payments, or using previous performance as part of the award criteria (without limiting entry to new suppliers).
- Poor past performance should be considered in tenders to score technical capabilities of bidders or to avoid inviting those companies to restricted tenders or consider them for direct awards. Again, it should be clear what “poor past performance” means to avoid discretionary decisions.
- Ensure poor performance has consequences for suppliers (i.e., penalties, fees, termination of contracts, etc.). Sanction enforcement should be reviewed periodically to assess its effectiveness.
- Given that supply in the oil industry is highly concentrated, consider the implementation of a Pareto strategy to assess first those suppliers with the highest amounts of sales to PEMEX and those who provide critical inputs, equipment, or services.
- Consider the use of different methods for monitoring supplier performance, according to needs, risks, and the specific advantages and disadvantages of each method. The right mix should minimise costs and risks, at the time that ensures compliance with contracts’ objectives.

## Chapter 5. Ensuring results for PEMEX: Implementing robust post-award contract management

Considering the share of procurement expenditure against oil and gas industry's revenue, suppliers provide central contributions to deliver on PEMEX business objectives. While procurement strategies developed by PEMEX are aiming at identifying and selecting suppliers offering the best value for money, the DCPA should ensure that such suppliers indeed deliver on their initial commitments. Besides strategic sourcing and complex assessment mechanisms to evaluate bids submitted in response to tenders, effective contract management is a decisive factor to ensure that suppliers participate in the maximisation of value creation in PEMEX operations. A comprehensive evaluation of procurement operations to inform future procurement decisions fosters efficiency throughout the procurement cycle. By monitoring and documenting suppliers' performance, public officials may require corrective actions when performance fails to meet the contract requirements. Implementing an effective post award contract management would maximise the outcomes of PEMEX's procurement processes.

- An effective contract management system requires monitoring and reporting suppliers performance, a clear definition of roles and responsibilities, and the necessary data integrated into dedicated IT tools to allow for a qualitative assessment of the suppliers' performance and a proactive approach focusing in improving buyer-seller relationship and preventing problems.

**Figure 5.1.- Contract management's contribution to performance**



- According to the existing procurement guidelines, the DCPA has the responsibility to carry out commercial and financial assessment when suppliers register and verify the proper execution of the contracts signed with its suppliers. The DCPA holds a sub-directorate responsible for the development and relations with suppliers and contractors (*Subdirección de Desarrollo y Relación con Proveedores y Contratistas, SDRPC*).

- Yet, the centralisation of procurement activities poses some challenges for objectively assessing suppliers' performance. As the SDRPC is responsible for overseeing all suppliers it needs to liaise with business units to collect necessary information regarding contractors' performance. To do so several IT systems are used to gather information from different sources.
- Commercial and financial risks assessments of bidders in PEMEX is done by US-based company named Achilles and performance assessment is carried out on the basis of information inputted in the Supplier Registration and Evaluation System. The Supplier Registration and Evaluation System is an important step for improving supply chain visibility for both suppliers and for the different business areas of PEMEX.
- This tool is meant to act both as a qualification system but also as a living repository of technical or environmental standards and certifications. It comprises a two-step registration process with different requirements. All suppliers and contractors must complete the basic registration, where they will be required to provide generic information about their company, including financial records. Suppliers and contractors may be invited to register at the next level (Extended registration) and being asked to provide additional information and documentation related to a wide range of business aspects, including financial, product and service quality certifications, health and safety and Corporate Social Responsibilities policies.
- The SDRPC manage also the PEMEX Pass platform that provides technological support to information exchanges between the DCPA, business units and suppliers but not information on suppliers' performance.
- To carry on performance assessment of existing contracts with suppliers, the DCPA retrieves transactional information in the SAP-Ariba system that administrates and includes information on suppliers' performance but this transactional information only indirectly depicts suppliers' performance in executing contracts signed with PEMEX.
- Finally, additional information on performance of executing contracts signed by PEMEX is also gathered from project manager through periodic survey asking providers feedback on understanding of the business and client service, innovation and technology, quality, contract management and compliance, human resources, security and social responsibility
- While the DCPA is able to retrospectively assess suppliers' compliance in executing contracts through various information provided from different sources it is not able to carry out regular performance evaluation of contractors which would contribute to performance improvement. By doing so the DCPA can impulse a strategic shift for the management of suppliers, from contract compliance to contract management.
- A contract management framework consists in a structured engagement with suppliers to adequately and meaningfully track and manage their performance in various contractual dimensions which should be aligned with PEMEX strategic orientations. This alignment could provide PEMEX with tools to leverage suppliers' capabilities, maximise value creation and foster innovation.
- Performance assessment framework and its related tools and processes should be an inherent component of the tender documentation to ensure its effectiveness as it allows suppliers to clearly understand performance requirements and regular measurements from the outset, thereby contributing to align suppliers and PEMEX business operations. Yet, it needs to be adequately designed or understood, as it could harm competition by imposing restrictive conditions
- Although proving beneficial to increase the efficiency of the contractual relationship between PEMEX and its suppliers, a contract management system involves complex and time-consuming tasks requiring extended communication both internally and externally. Therefore a balance should be found to

develop a sustainable model based on its methodology for strategic sourcing and notably the supplier segmentation against the criticality and value of the services and products provided by them.

- To address complexity and sustainability issues PEMEX could also define a flexible governance structure of its contract management framework as it is the case in other oil and gas companies. As PEMEX has not developed performance indicators to assess internal efficiencies and therefore implementing tailored indicators aiming at evaluating suppliers' performance is decisive step towards the introduction of an effective contract management framework.

### ***Proposals for Action***

- Develop a comprehensive contract management framework defining roles and responsibilities between the DCPA and the business units. This framework should not only allow PEMEX to carry out ex-post evaluations but also to implement regular reviews of suppliers' performance.
- Reinforce regular and structured exchanges with suppliers during contract execution to understand potential shortcomings.
- Adapt this framework to complexity and critical of the goods or services procured so as to ensure the sustainability of the system for both PEMEX and its suppliers.