

### Chapter 3. Relying on comprehensive information to inform public procurement decisions at IMSS

*Fully exploiting comprehensive information from different sources will help IMSS to develop tailored strategies aiming at enhancing its procurement outcomes while delivering cost-effective services to its beneficiaries. Given the potential offered by the digitalisation of procurement processes, this chapter explores how IMSS could further leverage on existing IT tools to enhance the overall efficiency of its procurement system. Furthermore, this chapter analyses how procurement intelligence could support IMSS in delivering on its strategies. Last, this chapter discusses how IMSS could further evidence the added-value and impact of its procurement strategies.*

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

As every policy area, public procurement is governed by a specific regulatory framework which includes the set of rules each contracting authority should follow. The legislative framework however doesn't in itself provide those entities with all means to ensure efficient and effective public spending. To do so, besides legislative provisions and manuals, procurement officials need to rely on information available from a variety of sources to tailor specific strategies ensuring efficient outcomes. This is not less central in health procurement. Indeed, efficient spending through sound public procurement practices provides the opportunity to improve the quantity and quality of health products and services and ensure their delivery in a timely manner. Information to define procurement strategies and measure the performance of the system could be provided by an enabling technological environment. Therefore, this chapter will assess the degree to which the digitalisation of IMSS procurement system contributes to its overall efficiency. Furthermore, this chapter also identifies opportunities to further strengthen the collection, structuring and use of procurement-related information at the different stages of the procurement cycle. The analysis refers also to the recommendations provided by the OECD in the previous review of IMSS including recommendations on the e-procurement system (OECD, 2013<sup>[11]</sup>). It will therefore assess the implementation and impact of the various OECD recommendations.

### Digitalising procurement to improve efficiency

#### *To further streamline procurement operations, IMSS could leverage on existing information systems, both internal and external*

Given the sheer volumes of money involved in public procurement, and recognising the benefits of e-procurement, many countries (OECD and also non-member countries) have developed e-procurement systems in recent years. E-procurement systems can significantly simplify the way procurement is conducted, reduce waste and deliver better procurement outcomes (European Commission, 2016<sup>[21]</sup>).

E-procurement refers to the integration of digital technologies in the replacement or redesign of paper-based procedures throughout the procurement process. It is an effective tool to increase transparency, facilitate access to public tenders, increase efficiency through automation of tasks, reduce direct interaction between procurement officials and companies, increase outreach and foster competition. The OECD Recommendation on Public Procurement calls upon countries to improve public procurement systems by harnessing the use of digital technologies to support appropriate e-procurement innovation throughout the procurement cycle (OECD, 2015<sup>[31]</sup>). A well-functioning e-procurement system can advance many of the other pillars of a sound public procurement system. It is a pivotal instrument to generate information to inform future public procurement decisions.

The digitalisation of the procurement process includes two main aspects: (1) digitalising the external platforms publicising tendering processes; and (2) digitalising the internal systems supporting whole-of-procurement activities, including tender preparation and contract management till the completion of the contract. As shown in Table 3.1, all OECD countries have e-procurement systems with various functionalities covering the whole procurement cycle.

Table 3.1. Provision of e-procurement functionalities

	Announcing tenders	Provision of tender documents	E-submission of bids	E-reverse auctions	Notification of award	E-submission of invoices	Online catalogue
Australia	●	●	●	○	●	○	○
Austria	◆◆	◆◆	◆◆	◆	●	●	◆
Belgium	●	●	●	●	●	◆	●
Canada	●	●	○	○	●	◆	◆
Chile	●	●	●	○	●	○	●
Denmark	◆◆	◆	◆◆	◆	◆◆	◆◆	○
Estonia	◆◆	◆◆	●	●	●	◆	○
Finland	●	●	●	●	●	●	◆
Germany	◆◆	◆◆	◆◆	○	◆◆	○	○
Greece	●	●	●	●	●	○	○
Hungary	●	●	○	○	●	○	○
Iceland	●	●	○	○	●	●	○
Ireland	●	●	●	○	●	○	○
Israel	◆◆	◆◆	○	●	●	●	○
Italy	◆◆	◆◆	◆◆	◆	◆◆	●	●
Japan	◆◆	◆◆	◆◆	○	◆◆	◆◆	◆◆
Korea	●	●	●	○	●	●	●
Latvia	◆◆	◆◆	●	○	◆◆	○	○
Mexico	●	●	●	●	●	○	○
Netherlands	●	●	●	○	●	○	●
New Zealand	●	●	●	●	●	◆	●
Norway	●	●	◆	○	●	◆	◆
Poland	●	◆	○	●	●	○	●
Portugal	●	●	●	●	●	○	●
Slovak Republic	●	●	●	●	●	○	○
Slovenia	●	●	○	●	●	●	●
Spain	●	●	●	○	●	●	●
Sweden	◆	◆	◆	◆	◆	◆	○
Turkey	●	●	●	○	●	○	○
United Kingdom	●	◆	◆	◆	●	◆	◆
<b>OECD Total</b>							
● In a national central e-procurement system	29	26	21	11	29	10	11
◆ Only in e-procurement systems of some specific procuring entities	1	4	3	5	1	7	5
○ No	0	0	6	14	0	13	14

Source: (OECD, 2017<sub>[4]</sub>)

Much fewer countries have e-procurement systems covering the entire procurement cycle, including electronic submission of bids, contract management or provision of invoices. Yet greater digitalisation of the procurement process can act as a commercial incentive for suppliers which impacts on productivity through for instance time savings and costs savings (EBRD, 2015<sup>[5]</sup>). It could also impact internal productivity, one of the five goals of IMSS's institutional programme for 2014-2018, by automating repetitive administrative tasks.

In Mexico SFP is in charge of implementing the federal e-procurement system CompraNet. The system has been launched since 1996 and has been continuously improving. The use of CompraNet is mandated by the two public procurement laws: the law of Acquisitions, Leases 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 Publicas y servicios relacionando con la misma* – LOPSRM); and their regulations: the Regulation of the LAASSP (*Reglamento de la Ley de Adquisiciones, Arrendamientos y Servicios del Sector Público*– RLAASSP) and the Regulation of the LOSRM (*Reglamento de la Ley de Obras Publicas y servicios* – ROPSRM).

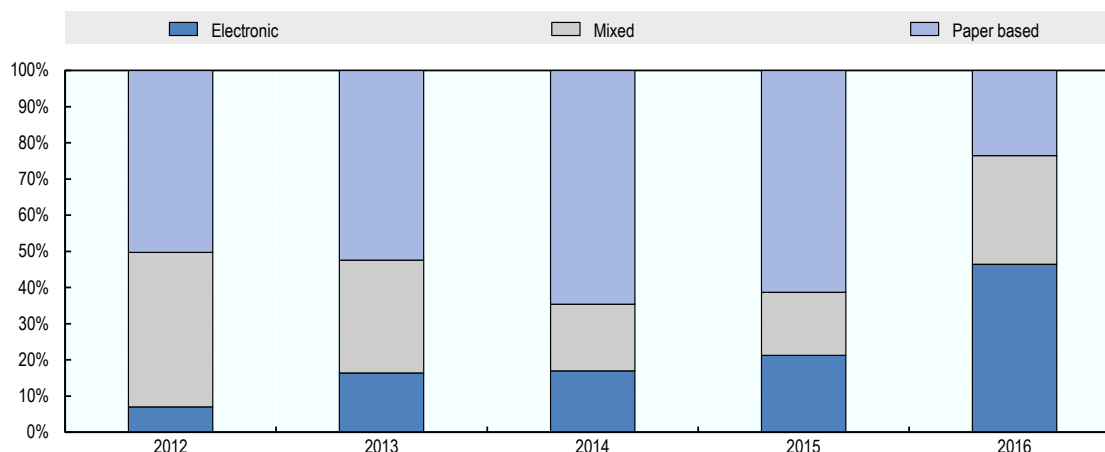
CompraNet's main objectives are:

- contributing to harmonised policies for public procurement in the federal public administration
- promoting transparency in the procurement process
- generating the necessary information for the adequate planning, scheduling and budgeting of public procurement activities.

Although all functionalities in CompraNet are supporting those objectives, the electronic submission of bids provides multidimensional benefits. The submission of electronic bids facilitates data analysis and retrieving information. As described in Table 3.1, Compranet includes this functionality; however according to article 26 of LAASSP, this functionality is not mandatory. Contracting authorities can decide whether to allow electronic submissions or not and can ask economic operators to submit their bids either on paper, electronically, or both (mixed or hybrid procedure)).

When tenders are submitted in hybrid or paper form, contracting authorities have to organise clarification meetings and bid opening sessions that involve the physical presence of all bidders. For electronic processes, on the other hand, bidders can participate virtually, reducing the direct costs for both contracting authorities and suppliers relating to the organisation and attendance of those mandatory meetings. Some electronic bidding information, such as prices, can also be automatically integrated into IMSS's internal procurement system, the SAI. When IMSS receives paper based bids, minimum information is manually reported in the SAI by IMSS officials. The manual process includes a risk of error which can affect data quality and harm the quality and efficiency of the system.

According to data provided by SFP, in 2016, less than half (46%) of bids were submitted electronically, representing 59% in terms of procurement volume. There has been a remarkable increase in the use of full electronic procedures in the last five years – from 7% of procedures in 2012 to 46% in 2016. While mixed procedures decreased from 2012 to 2015, it is worth noting that this decrease was not only in favour of electronic procedures, but also paper-based procedures (Figure 3.1).

**Figure 3.1. Number of procurement tenders by type of submission**

Source: Data provided by SFP

Among the challenges usually identified when implementing an end-to-end mandatory e-procurement system are stakeholder's objections (EBRD, 2015<sup>[5]</sup>). These include objections from the private sector, linked to concerns about the lack of remote connectivity, the low level of computer literacy, data security etc. However, despite the Internet penetration rate in Mexico (around 56% of the population in 2016 according to (Internet World Stats, 2016<sup>[6]</sup>)), representatives of the private sector interviewed during the fact-finding mission clearly indicated their preference for electronic procedures, while noting potential issues with the upload of heavy documents. Taking these views into account, IMSS could benefit from further promoting e-submission in its procurement procedures, not only to eliminate red tape costs, but also to enhance data quality in supporting future public procurement decisions.

With increased electronic information, IMSS could build on the benefits of direct integration with its internal IT systems. These systems are mainly used for managing the entire procurement cycle, in particular the pre-tendering and contract management phase. They are often based on Enterprise Resource Planning (ERP) tools, which are used not only for procurement activities, but also for the management of human resources, finance and other areas, ensuring increased visibility, automated processes, improved efficiency and productivity. Being off-the-shelf solutions, those systems could however be further customised to fit specific strategies and legislative environments. Table 3.2 describes the benefits of an effective IT system for procurement activities.

**Table 3.2. Benefits of a strong IT system**

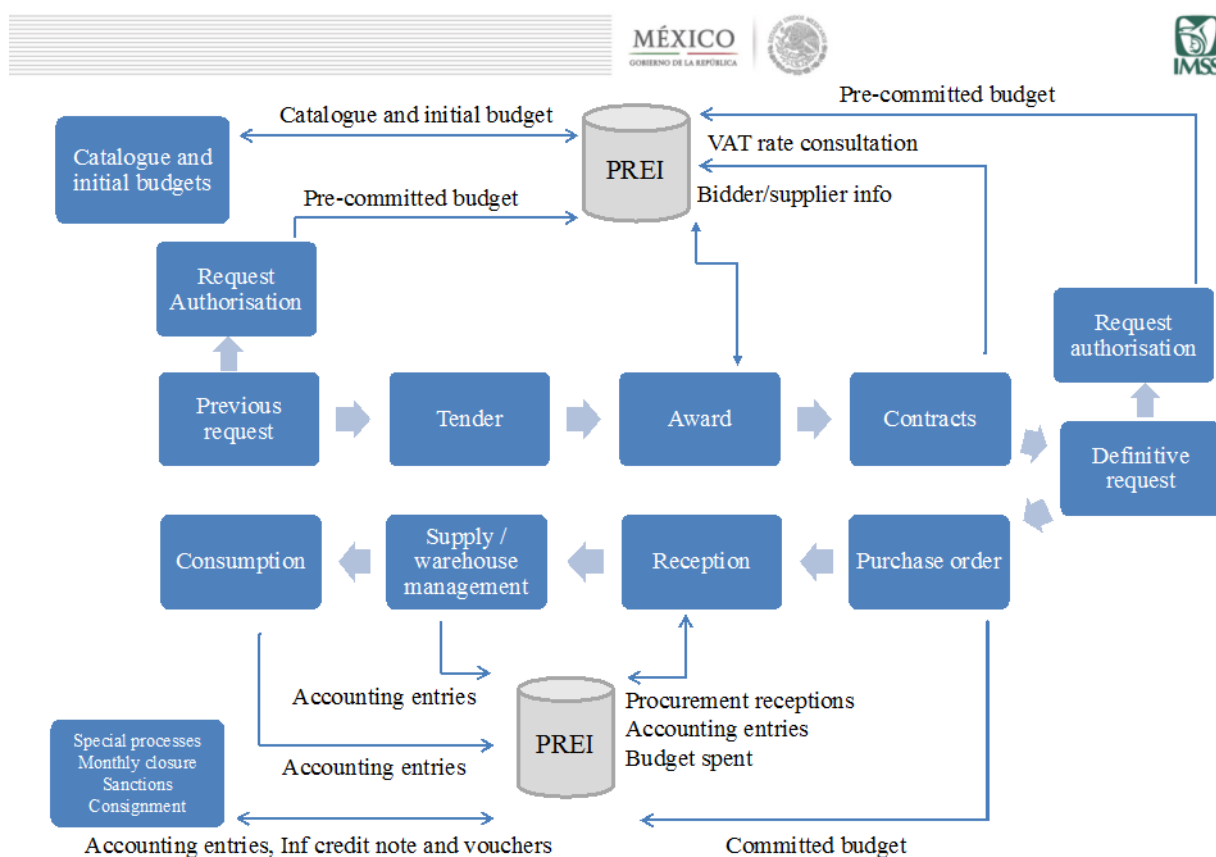
Functionality	Benefits
Spend visibility	View spend by procurement categories/ suppliers/ units, etc
Stock management	Management of stocks on a regular basis to ensure meeting the needs
Electronic purchase orders	Issue electronic orders taking into account available stocks
Automatic workflows	Faster validation process and transparency
Data collection	Development of indicators

Source: adapted from (Australian Government, (n.d.)<sup>[7]</sup>)

IMSS has two systems in place to manage procurement activities: the SAI and the Institutional Resources Planning (*Planeación de Recursos Institucionales* – PREI). The SAI has been developed in 1997 and implemented in 2000 to support IMSS procurement activities. The PREI is the platform used by IMSS to manage budget and financial information.

In line with its strategy of technical modernisation, IMSS decided in 2008 to incorporate SAI modules to the PREI. This migration would enable to enhance the efficiency of the system and have a full visibility on procurement activities and budgeting aspects (Figure 3.2).

**Figure 3.2. Functionalities of the new SAI**



Source: Information provided by IMSS

### ***Doing more to align IMSS's IT systems with current procurement strategies***

IMSS used to have another IT tool to carry out some procurement processes – the single registry of suppliers (*Bolsa Unica de Ofertas*-BUO). It was used by delegations and UMAEs to address immediate needs based on prior authorisation from the central level. These immediate needs might include a supplier's non-performance, unsuccessful tenders or unforeseen exceptional needs. Interested potential suppliers had to register in this platform and provide information on the categories of goods and services they could supply and with what conditions. To enhance the efficiency of the system and to reduce duplications, the last OECD review recommended that IMSS enhance the BUO by

integrating it with CompraNet (OECD, 2013<sup>[1]</sup>). However, IMSS did not manage to integrate the BUO with Compranet due to the cost of the technological modifications required. Instead, IMSS carried out further investigations into the efficiency of the system and decided to stop using the BUO platform in 2014. The institute realised that the system did not promote competition or encourage suppliers to give their best offers since they knew that IMSS entities would not risk a supply disruption. Suppliers used to set high reference prices which were harming the efficiency of the system.

Following this decision, IMSS then introduced a new process called “Local procurement” (*Compras locales*). The main goal of this scheme is to determine terms and characteristics that UMAEs and delegations have to follow when undertaking a procurement procedure. Unlike the BUO, the local procurement scheme has to be undertaken through CompraNet and requires budget validation by the central area.

As IT tools should support organisations’ strategic objectives, IMSS could benefit from pursuing the analysis of its information system to assess whether it is supporting its procurement strategies. For example, IMSS could assess whether the current functions of its systems are aligned with its daily procurement practices.

While the integration of the SAI modules to the PREI and the “Local procurement” process represent a clear improvement for IMSS, it could be further improved to meet international best practices and to be in line with the legal framework for procurement. For example, for the bid evaluation, Article 36 of the LAASSP only allows for the use of the “pass or fail” or binary method (*criterio binario*) if it is not possible to use the points and percentage evaluation mechanism. However, the new system is built to support procurement processes using only the binary method.

The current system also only includes sections on prices submitted by bidders. It doesn’t allow for the entry of points associated with other criteria (technical, environmental, etc.) or the weights associated to each criterion. This prevents procurement officials from using other evaluation methods to undertake a comprehensive bid analysis based on multi-award criteria. This limitation of the current system is maintained in the new system integrating SAI modules to the PREI harming the overall efficiency of the procurement system. IMSS should consider bringing its information system in line with the legal framework, which enables procurement officials to use the most appropriate evaluation method (award criteria, their weights and scoring method), which will support increased efficiency of the entire procurement system.

Having an automated process is crucial to ensure the efficiency of the system and to increase the productivity of the different stakeholders involved in the procurement process; however to reap the benefits of automation, stakeholders need to be informed about the process stages. Following the tender procedure and the notification of contracts, the new system does not include automatic notification to Requiring Areas of the availability of contracts. This means that Requiring Areas need to check regularly to see if contracts are available in order to issue purchase orders. This undermines the productivity and efficiency of the system.

In addition, while IMSS has developed a specific web interface for suppliers, the system does not include an automatic notification to alert suppliers of the issuance of purchase orders. From January to September 2017, IMSS issued on average 3 081 purchase orders per day. Again, suppliers need to regularly check the web interface to make sure they are aware of all purchase orders issued, increasing the risk of delays of urgent purchasing.

IMSS should consider adding notifications to its IT system for relevant stakeholders involved in the procurement process.

Besides additional opportunities in the management of tenders and contract execution, IMSS's internal system should also be flexible and scalable enough to ensure it serves different procurement strategies. As an example, procurement strategies identifying leasing schemes as opposed to buying might require different accounting rules. No less important is to adapt the internal system to the organisational structure of IMSS's procurement function.

### ***Improving internal sharing of information would inform IMSS procurement strategies***

Procurement takes place at different levels: at the national level through consolidated tenders, centrally and by the UMAEs and the delegations. Around 57.5% of IMSS's procurement activities, representing around USD 2.27 billion,<sup>1</sup> are undertaken by the delegations and UMAEs. While all entities are using the same system, they each have dedicated servers which provide information to the central database. When goods and services are not procured under the centralised scheme, each IMSS entity undertakes its own procurement procedure. In this system, officials from a specific entity only have access to information related to procurement activities undertaken at their entity level. If they want to consult contractual conditions or prices offered or paid by other IMSS entities, for instance, officials need to access the information through CompraNet, though this information may not even be available there. Indeed, as discussed later in this chapter, data on CompraNet are not always harmonised and are rarely reusable.

Sharing information among IMSS's different entities would help the decentralised entities define the most appropriate procurement strategy. The internal information system does not include a "read-only" mode, which implies that if IMSS's central procurement unit gives access to information on a specific entity to officials from other entities, data could be modified. Enabling all officials involved in procurement activities to access to IMSS-wide procurement information in a "read-only" mode would be useful to tailor procurement strategies and ensure consistent practices across all entities.

In addition, critical documents – such as market analysis undertaken by each delegation and UMAE, as well as at the central level – are not integrated into the internal IT systems. Each official in charge of a specific procedure keeps the documents on their own computer. This risk losing the information over time and duplication of effort by entities undertaking similar procurement procedures. IMSS could consider developing a platform for sharing such information among procurement officials from the different levels. Box 3.1 gives the example of an information system developed in France in 2016 by Resah, a public interest group aiming at supporting the performance of the health sector.



### Box 3.1 Sharing procurement information in France

Resah aims at supporting the performance of the health sector through the aggregation of demand and the professionalisation of the procurement workforce. It has two main activities: a central procurement body and a centre of expertise. Considering that IT tools can be a lever for operational performance, in 2016 the Resah developed an IT platform with four modules: 1) aggregation of demand; 2) standardisation, 3) performance management; and 4) exchange.

The exchange module's main objective is to serve as a collaborative platform for procurement officials from the various entities and hospitals which form part of the group. It includes three main spaces:

- Communication: news, exchange fora
- Contact details: joint directory, organisation chart per hospital department, etc
- Work: Good practice sheets, satisfaction questionnaires, exchange of best practices

Beyond merely sharing procurement data, this information-sharing system creates a community of users who exchange ideas on procurement best practices and provide insights into strategic stages of the procurement cycle, such as information necessary to design procurement strategies.

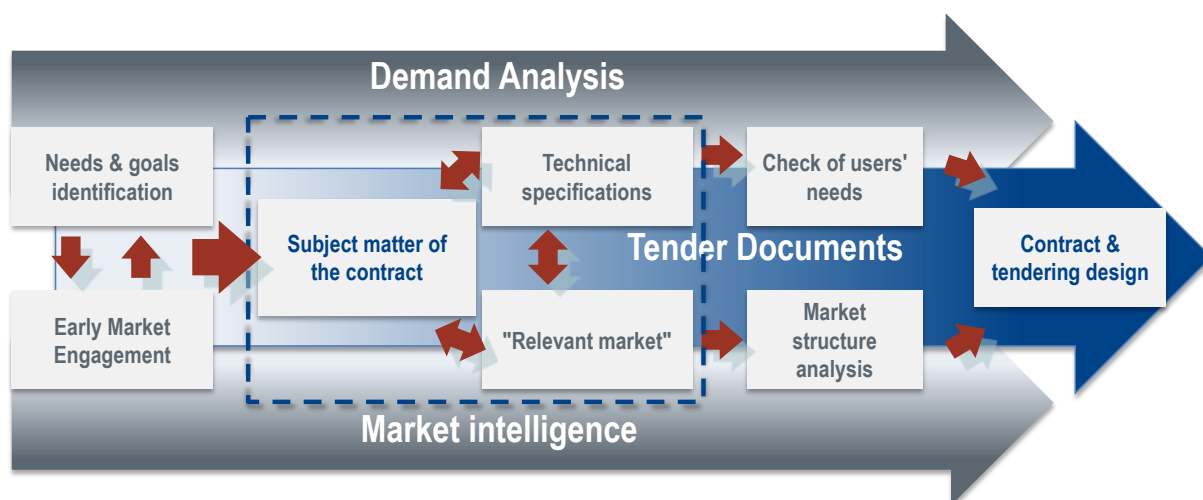
*Source:* Adapted from (Resah, 2016<sup>[8]</sup>)

## Using procurement intelligence to help IMSS implement its strategies

Successful procurement activities require matching demand with supply. Demand analysis, also referred to as needs analysis, is the first step in procurement. However, it is not limited to analysing the quantities of goods and services required; it is also about understanding the needs in terms of performance and functionalities expected. Indeed, demand which is oriented towards solutions and not products has the potential to improve public service delivery (Chapter 9).

In addition, demand analysis should go hand in hand with a sound market analysis to identify the characteristics, capacity and capability of the supply market. This will enable an understanding of the extent to which the market can meet the needs of the procuring entities (Figure 3.3). These two steps affect the tender design and the whole procurement cycle since they shape the tender documentation. This is why – in line with international best practice – procurement entities should view these as strategic rather than administrative tasks. Market and demand analysis should no focus only on high value tenders at the central level; those are required steps to undertake for each procurement procedures taking place at all levels.

Figure 3.3. Functionalities of the new SAI



Source: (OECD, 2017<sup>[9]</sup>)

***To unleash the power of consolidated tenders, IMSS could better capture decentralised needs***

IMSS procurement activities are performed at three levels: locally, by delegations and UMAEs; centrally, when aggregating the needs of delegations and UMAEs; and nationally, aggregating IMSS's needs with those of other entities of the health system through consolidated tenders. Demand analysis is typically performed over a two-week period and is based only on existing products and services and on historical procurement. Decentralised entities have to identify products and services included in the six internal catalogues derived from the national catalogues (*cuadros basicos*): drugs, healing material, food, auxiliary diagnostic, instruments and medical equipment, osteosynthesis and endoprothesis.

The Co-ordination of Supply Control department (CCA) is responsible for collecting and analysing the needs of the UMAEs and delegations. This demand analysis involves five steps:

1. The CCA disseminates guidelines to Delegations and UMAEs for determining needs and calculating demand based on the universal operative catalogue for therapeutic goods and services and the schedule of activities.
2. Delegations and UMAEs report their needs through the internal procurement system (SAI).
3. The CCA analyses and validates their needs, identifying variations based on the validated average consumption and the real consumption of the previous year.
4. The CCA informs delegations and UMAEs of the main variations to enable them to ask for further clarifications or to make the necessary adjustments before including them in the final version.
5. The CCA consolidates the final requirements and analyses the products and services to be procured through the centralised procurement scheme. Products and services with specific characteristics, or which are not commonly procured, will be procured directly by the local entities.

On the basis of this demand analysis, IMSS's central procurement unit decides on the level of aggregation of needs in the annual procurement programme-PAAAS. (Figure 3.4). These steps enable the annual procurement programme to be completed.

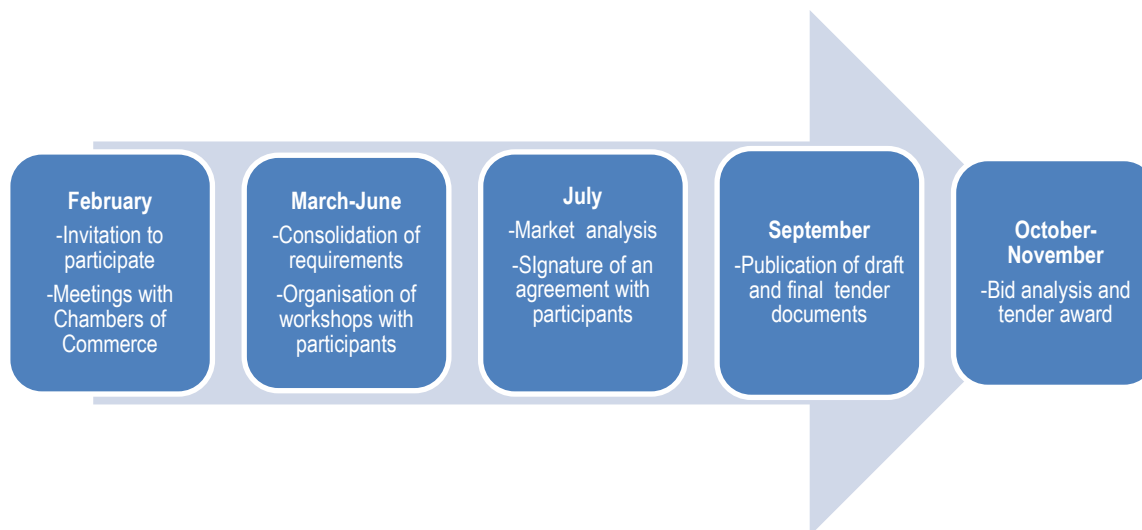
**Figure 3.4. Impact of demand analysis on the procurement strategy**



*Source:* Information provided by IMSS.

Demand analysis does not capture the performance or functions expected; each delegation and UMAE might also have specificities which will require solutions with specific characteristics or functions. Understanding the specific requirements of decentralised entities beyond the products or services required is central to the decision on the level of aggregation, however. This has been a problem in some consolidated tenders for medicines where different delivery requirements have hindered them from achieving their overarching objectives.

Consolidated tenders or joint procurement arrangements aggregate the demands of the various entities. This gives them increased purchasing power and offers opportunities for economies of scale and lower administrative costs for the entities that are part of the agreement (Burns and Lee, 2008<sup>[10]</sup>) and ; (Nollet and Beaulieu, 2005<sup>[11]</sup>). IMSS started consolidated tenders in 2011 with one partner (SEDENA). By 2016 more than 40 partners were involved, dramatically scaling up the impact of the exercise. In order to achieve their objectives and their potential to generate savings and reduce transaction costs, initial demand analysis needs to be complemented by a more detailed assessment of public entities' requirements (Figure 3.5).

**Figure 3.5. The process involved in consolidated tenders**

*Source:* Information provided by IMSS.

In order to reap the benefits of consolidated tenders and demand aggregation, according to accepted good practices, a number of criteria and parameters need to be taken into account:

- Homogenous needs: ensuring that entities have the same needs for products and services under the consolidated tender.
- Financial situation of each partner: including partners with financial issues might represent a risk for the suppliers, who then might apply a uniform premium for all prices of products and services under the consolidated tender.
- Delivery options (time, location and quantity) of each partner: the presence of several delivery options in the same contract can make it hard to disentangle the incremental value of a particular delivery option
- Timing of purchase: timings need to be aligned across entities, meaning that the starting date of the contract should be convenient for everyone.

In the consolidated tenders managed by IMSS, there is no specific process for selecting the entities to be part of the agreement. Indeed, any entity interested in joining the consolidated tender can do so if they fulfil basic requirements: providing the required information, having substantial needs and providing benefits to the tender. However, no further analysis is performed to analyse factors such as the different delivery options or the financial situation of entities part of the agreement. Given that suppliers have to set uniform prices, some entities may have to pay a premium because of other entities' specific requirements or financial situation. As the primary mission of health institutions is to provide universal health access, the analysis of partners' financial situation should not lead to their exclusion. However, entities should provide guarantees to reassure potential suppliers. IMSS should review its methodology for consolidated tenders to include a careful analysis of all the different parameters in order to implement mitigation measures if needed.

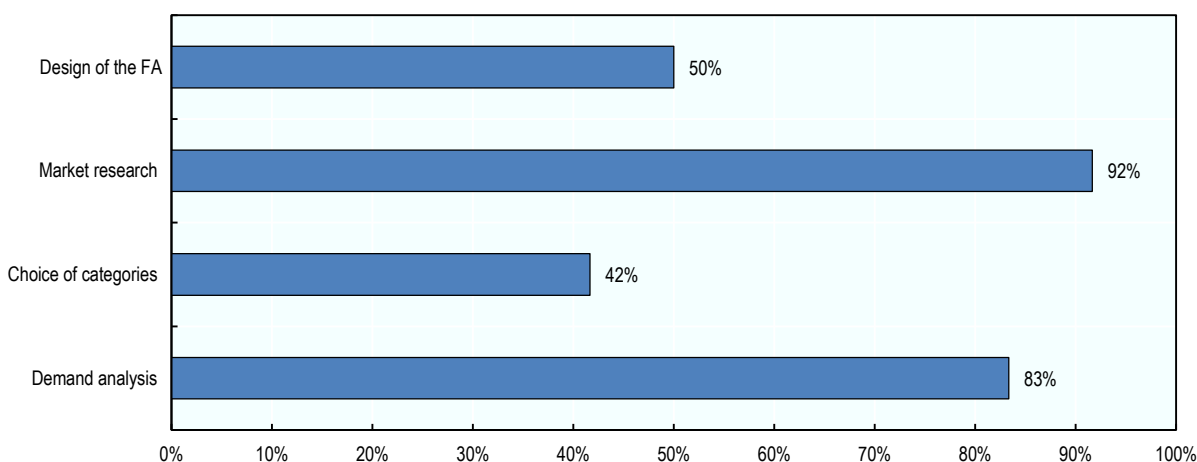
***A better engagement with suppliers and understanding their capabilities would help IMSS in coping with concentrated markets***

In addition to capturing internal demand, procurement strategies and tender design are also defined according to knowledge of the market (Figure 2.3). Effective communication channels are needed between the private sector and public officials in charge of procurement activities for two main reasons. First, it will enable potential bidders to better understand the entity's needs, and second it will provide officials in charge of drafting or reviewing technical specifications with a better understanding of market capabilities (see also Chapter 4).

Information asymmetries often arise in public procurement since potential suppliers often have more information than the contracting entity on their costs, prices, market trends, products or services, and their substitutes. Therefore, engaging with suppliers could help decrease the information gap for the contracting entity by allowing them to collect more reliable and up-to-date information on the market.

Engagement with the private sector could involve two elements, depending on the time at which it occurs. As mentioned above the public entity could provide general information on future procurement opportunities to alert potential suppliers on future tenders. It could also engage in more detailed exchanges with the market to shape a specific procurement strategy. Both types of effort could help to mitigate market concentration and attract new suppliers. As shown by a recent survey of procurement practice across the OECD, the private sector is consulted to varying degrees at different stages of tender design (Figure 3.6).

**Figure 3.6. Supplier consultation at different stages of framework agreement (FA) preparation**



*Note:* The figure is based on responses received from 11 OECD countries—namely, Belgium, Canada, Chile, Finland, France, Greece, Hungary, Italy, New Zealand, Portugal and Spain—and 2 non-OECD countries—Colombia and Costa Rica.

*Source:* (OECD, 2017<sup>[12]</sup>)

Every year the Mexican Ministry of Economy organises a public procurement fair (“*Expo Compra de Gobierno*”) to raise supplier awareness. This fair serves as a platform for contracting authorities and potential suppliers to meet and discuss procurement opportunities and the existing solutions in the market. In 2015, 17 ministries and 93

public entities participated in this fair, including IMSS and other large contracting authorities such as PEMEX and the Federal Electricity Commission (*Comisión Federal de Electricidad*, CFE). Those IMSS officials who have participated reported clear benefits, though only officials from the central area of IMSS attended. IMSS could consider also involving and inviting procurement officials from UMAEs and delegations to give them a better sense of the market's capacity.

Some entities in other OECD countries organise similar meetings and events with suppliers, but on a more regular or sector-oriented basis. IMSS could benefit from organising similar events. Box 3.2 provides an example of “speed-dating events” in New Zealand.

### Box 3.2. Procurement “speed dating” in New Zealand

“Meet the Buyer” is an event that brings small and medium-sized enterprises (SMEs) together with large purchasing organisations, giving them both an informal platform for engagement. The highlight of the Meet the Buyer event is the series of 15-minute pre-arranged meetings where small businesses (sellers) get to meet with the large purchasing organisations (buyers) and find out about their upcoming procurement activity and/or present their product/service offerings.

A typical Meet the Buyer setup will also have areas for a mini-expo and presentations where businesses can network with others, speak with exhibitors and access topical information and tools.

- Meet the Buyer is advertised through various channels: Potential suppliers will get to know the details of participating buyers and their interests, overviews of key projects or essential service needs.
- Sellers send in their expressions of interest to meet with particular buyers via a simple web form.
- Buyers shortlist businesses they want to meet: With a limited number of meetings available, buyers shortlist businesses based on their expressions of interest. The shortlisting is done after the period for expressions of interest closes so that the meetings arranged are beneficial to both parties.

Source: (New Zealand Government Procurement, (n.d.)<sup>[13]</sup>)

The outreach of procurement opportunities can be extended through means other than annual fairs. IMSS has developed a microsite to provide updates on its procurement activities. It includes relevant information for suppliers such as: 1) What has IMSS procured in the past? ; 2) What is IMSS planning to procure; and 3) Who are IMSS's suppliers? The section on what IMSS is planning to procure provides information to all potential suppliers on future procurement opportunities. These are classified by categories of products and services, but not by IMSS entities. Information on IMSS's past procurement activities helps suppliers understand IMSS's previous procurement in terms of geographical distribution, which has a strong link with future procurement. Based on this information, potential suppliers can prepare for upcoming tenders, thus helping to increase competition.

However, two main issues with this microsite have been identified by the review team that hinder this objective. Firstly, the information is not regularly updated and contains

information from previous years. Secondly, there is only information on procurement opportunities for the current year and not on a longer-term basis. Given the fact that IMSS is implementing multi-year contracts in certain product categories, it should be able to provide information to potential suppliers on procurement opportunities in the next few years. IMSS would therefore benefit from updating the information on its procurement activities as well as including information for the coming years.

In addition to raising general awareness on future procurement opportunities, market analysis in the pre-tendering phase helps to reduce information asymmetries and to understand market capacity, ultimately feeding into the design of tenders. It is a useful tool to adjust tender specifications so as to maximise competition (OECD, 2017<sup>[12]</sup>). Undertaking a sound market analysis has several advantages, such as:

- Increasing awareness of the characteristics of the market and recent market developments or trends that may affect competition for the tender or that may make collusion more likely (e.g. small number of suppliers, standardised or simple products, little or no entry, etc.).
- Collecting information on suppliers, their products, prices and cost structures. If possible, a comparison of prices offered in business-to-business procurement is recommended.
- Collecting information about recent price changes. This will help procurement practitioners to be informed about prices in neighbouring geographic areas and about prices of possible alternative products.

In Mexico, Article 2-X of the LAASSP defines market analysis as a process that provides information on the existence of goods and services; providers at the national and international level; and estimated prices based on historical prices, prices from other entities (public and private) and prices from potential suppliers. According to the law, market analysis is pivotal for defining reference prices and allowing for budget allocation. This could explain why the focus is heavily on comparative financial information and less on a structured analysis of the market, technological trends or alternative solutions.

To better grasp the costs and benefits of alternative solutions available on the market, market analysis should factor in associated costs with the purchase of a specific product. Market studies should be based on a comprehensive analysis that takes into account not only initial prices, but also the related functions, delivery conditions and product lifetime. This approach has been promoted in many countries, including in the European Union (Box 3.3).

Yet, encompassing these other elements in market analysis requires procurement officials with the necessary skills and specific training. The previous review identified market research as an area for improvement (OECD, 2013<sup>[11]</sup>). Following the reorganisation of IMSS, a market research unit was created in 2016 to support central procurement activities. The creation of the market unit is also in line with recommendations of COFECE, the Mexican Competition Commission (COFECE, 2016<sup>[14]</sup>). While this unit has developed a market research template, procurement officials remain dependent on the availability of information.

### Box 3.3. The life cycle approach in the European Commission

Life cycle costing (LCC) is being applied by an increasing number of public authorities across the EU and in a range of sectors. Under the 2014 EU procurement rules a contract must be awarded based on the most economically advantageous tender (MEAT). Cost or price will form part of the assessment of any procedure, and is usually one of the most influential factors. Costs may be calculated on the basis of a product's life-cycle. But how do you define the cost? When you purchase a product, service or work, you always pay a price. Purchase price, however, is just one of the cost elements in the whole process of purchasing, owning and disposing. Life-cycle costing (LCC) means considering all the costs that will be incurred over the lifetime of the product, work or service:

- Purchase price and all associated costs (delivery, installation, insurance, etc.)
- Operating costs, including energy, fuel and water use, spares, and maintenance
- End-of-life costs, such as decommissioning or disposal

LCC may also include the cost of externalities (such as greenhouse gas emissions), under specific conditions laid out in the directives.

LCC makes good sense regardless of a public authority's environmental objectives. By applying LCC, public purchasers take into account the costs of resource use, maintenance and disposal which are not reflected in the purchase price. Often this will lead to 'win-win' situations whereby a greener product, work or service is also cheaper overall. The main potential for savings over the life cycle of a good, work or service are:

- Savings on use of energy, water and fuel
- Savings on maintenance and replacement
- Savings on disposal costs

The European Commission is developing a calculation tool for life-cycle costing which aims to facilitate its use amongst public procurers. The LCC calculation tool will be developed in accordance with Article 68 of the current (2014) public procurement directives. It will focus on specific product categories, such as office IT equipment, lighting (indoor lighting), white goods, vending machines and medical electrical equipment.

*Source:* (European Commission,(n.d.)<sup>[15]</sup>)

The implementation of a lifecycle costing approach could be beneficial for IMSS for three reasons. First, building on recent efforts by the entity to improve its financial situation (González Anaya and García Cuéllar, 2015<sup>[16]</sup>), a comprehensive financial analysis of all the costs involved in purchasing a specific product would provide additional options to increase savings. Second, it could allow IMSS to procure products with a better overall performance, ultimately to the benefit of the final users: the patients. Third, it could serve to further ground the definition of estimated prices in market analysis which are used to assess tenders and to calculate savings. However, the benefits mentioned might be hindered by a provision of the legal framework. Indeed, according to Article 2 of the LAASSP, acceptable prices cannot be higher than 10% of median prices identified through market research. If the price is higher, offers are rejected. To avoid



supply disruption, the current system might provide the wrong incentives to overestimate reference prices.

Information from sources other than historical spending included in CompraNet such as benchmarks with national and international entities could also help IMSS develop a more robust market analysis. This is particularly valid given that IMSS's procurement portfolio consists of markets characterised by high price volatility and rapid technological changes. In addition, it could also provide grounds for decisions on the application of multi-year contract schemes. In addition to financial and technical information, a risk management approach (as discussed in Chapter 7) could give IMSS insights into alternative solutions and the potential impacts of various risks. This would allow IMSS to compile relevant information available supporting tender design.

IMSS could consider systematically publishing draft tender documents in order to receive the views of the private sector (see also Chapter 5), as is the case in other Mexican institutions (OECD, 2015<sup>[17]</sup>). Article 29 of the LAASSP allows for contracting authorities to publish the draft tender documentation on CompraNet for at least ten days. According to Article 41 of the RLAASSP, contracting authorities should publish draft tender documents for tenders with a value larger than 50% of the whole tendered amount, and gives priority to important tenders based on the programme, priorities, needs and main objectives of each entity. During this study, IMSS mentioned that currently 60% of tender procedures include the publication of draft tender documentation.

***To ensure consistent practice among its different entities and with the assistance of SFP, IMSS central procurement unit could consider further supporting decentralised pre-tendering activities.***

Increasing the effectiveness of both centralised and decentralised procurement would provide various benefits to IMSS. Although a few decentralised entities have a market research unit, they often lack capacity, while others view this step as an administrative exercise.

The fact-finding mission conducted as part of this study found that communication between the market research unit at the central level and the other IMSS entities is rather weak, which prevents them from drawing on the expertise developed at central level. The central market research unit could help officials undertaking market research tasks at the delegations and UMAE's level by sharing best practices and sound methodologies, as well as helping them with complex procurement activities. In addition, although several regional entities procure similar goods, they do not share market research, which could result in duplication and inefficiencies. As already discussed, better communication channels among the various regional entities could also increase the strategic use of market analysis.

The Ministry of Public Administration (*Secretaría de la Función Pública*, SFP) could also support the greater use of procurement information in designing future tenders by defining formats which allow information to be processed and re-used. Currently, contracting authorities can use information available in CompraNet for market analysis. This offers a rich source of information for public entities, including tender documentation, reports from clarification meetings and procurement decisions. However, the information is uploaded in a non-reusable format (pdf). When searching for information, public officials cannot extract the information needed directly; they have to go through the whole document, some of which are more than 100 pages. This is inefficient and prevents market analysis from playing a more strategic role in tender

design. SFP could assist IMSS in its efforts to enhance market research activities by defining a policy to require contracting authorities to upload reusable documents to CompraNet.

## Demonstrating the added value and impact of procurement strategies

### *Structured data would support the development of indicators allowing IMSS to assess the performance of its procurement system*

In a context where countries are seeking to make public service delivery more efficient and cost-effective – largely because of budgetary constraints, but also to respond to growing citizen demands – it is essential to undertake an in-depth assessment of the procurement system. The OECD Recommendation on Public Procurement calls on countries and entities to drive performance improvements by evaluating the effectiveness of the public procurement system from individual procurements to the system as a whole (OECD, 2015<sup>[3]</sup>). Countries and entities should therefore assess periodically and consistently the results of procurement processes and develop indicators to measure performance, effectiveness and savings for benchmarking and to support strategic policy making on public procurement.

This assessment is usually undertaken using various indicators, and plays a pivotal role in tailoring specific strategies and taking appropriate decisions. However, the development of these indicators requires the right kind of data, as well as the possibility to reuse them.

The digitalisation of the procurement process promises greater efficiency and productivity. However, to reap all its benefits, the system should not only stock data, but also collect data in a structured and reusable way. Therefore, when developing their platforms or IT tools, governments and entities need to think about the type of reporting and data needed (OECD, 2016<sup>[18]</sup>). The previous OECD review already highlighted how the lack of sufficient and credible procurement data within IMSS limits its capacity to make fully informed strategic decisions and optimise the efficiency of its procurement function (OECD, 2013<sup>[19]</sup>). Discussions during the fact-finding mission for this report also confirmed the persistence of this issue and the extent to which it is impeding further analysis. For instance, when the review team analysed purchase orders, several inconsistencies and issues were identified. Purchase orders should have a unique identifier comprised of 9 digits. However, when analysing data from 2013 to 2016, some identifiers are assigned to two different purchase orders and 2.3% of purchase orders do not have the required number of digits. In addition, the name of the delegation or UMAE is not consistent across the different purchase orders and IMSS data. These data quality issues make it difficult to conduct a sound analysis to support decisions.

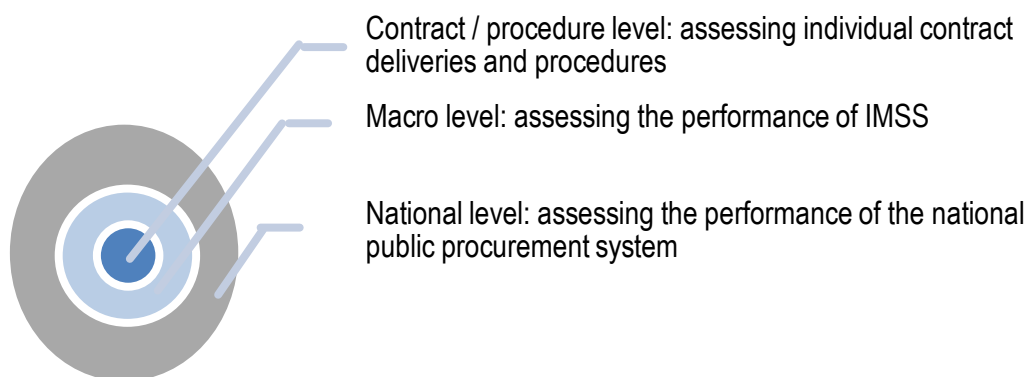
The CCA is developing a dashboard of procurement activities called the Executive Information System (*Sistema Ejecutivo de Información* - SEI), which will include information from the delegations and UMAEs' Internal Procurement System databases. The Directorate of Innovation and Technological Development (*Dirección de Innovación y Desarrollo Tecnológico* - DIDT) will be in charge of developing the SEI. The aim is for it to be the only database including all information on procurement activities, and the only source of information for developing indicators to manage and plan procurement activities and to inform decisions. Creating this dashboard will require extracting data from multiple sources – in turn this will require a common structured format to be defined so that it can support IMSS's strategic orientations.

In addition to internal tools, CompraNet is a useful source of information for internal and external stakeholders when documents are correctly uploaded and information is consistently inputted. However, our analysis of data from CompraNet as part of this assessment found so many errors it was difficult to evaluate and use the data. Procurement procedures are classified in CompraNet by the contracting authority's name and code, the procedure code, a description of the procurement procedure and the type of procurement activity (services, goods, public works, leasing). When undertaking a procurement procedure through CompraNet, IMSS entities do not always use the right codes or the right sequencing of numbers, making the use of data difficult and often impossible. This seems to be mainly due to the absence of shared guidelines for all IMSS entities on how to structure information in CompraNet. IMSS and SFP could benefit from building the capacity of officials in charge of uploading information on external platforms in data entry to enhance the quality of data for internal and external stakeholders.

The development of a structured set of data will lay the foundations for the definition and implementation of indicators that can demonstrate IMSS's procurement performance and identify areas for improvement. These indicators are usually referred to as Key Performance Indicators (KPIs) and should be adapted to the institution's setting.

The performance of public procurement systems can be assessed at three distinct levels (Figure 3.7): contract management/micro level, contracting authority/macro level and national/meta level. Those levels are closely linked, since the performance at the procedure or contract level has an impact on the performance of the entity, which has an impact on the performance of the procurement system at the national level.

**Figure 3.7. Three levels for assessing the performance of public procurement**



Applied to IMSS, these levels could correspond to individual contracts, decentralised entities and the whole institution. Indicators should be developed to reflect the strategies and policies developed at the entity or national level. Box 3.4 describes the key aspects to take into account when developing KPIs. In addition, it might be relevant to set specific targets that will serve as a goal for the entity. When measured, those indicators will help to identify gaps, bottlenecks and thus to continuously improve the system by undertaking relevant actions and/or tailoring specific strategies. Finally, not all the indicators have to be monitored with the same frequency. The majority could potentially be assessed monthly, and some others only quarterly or even annually.

### Box 3.4. Establishing good key performance indicators (KPIs)

Good KPIs must possess some fundamental qualities to fully benefit an organisation and its suppliers. They should be:

- **Relevant**, i.e. linked to key objectives of the organisation (critical outcomes or risks to be avoided), rather than on process.
- **Clear**, i.e. spelled-out in the contractual document and as simple as possible to ensure common understanding by the buying organisation and the supplier.
- **Measurable** and objective, i.e. expressed on pre-determined measures and formulas, and based on simple data that can be gathered objectively and in a cost-effective manner.
- **Achievable**, i.e. realistic and within the control of the supplier.
- **Limited**, i.e. as few as required achieving the objectives while minimising their disadvantages (costs, efforts and risk of dispute) to both entities. To the extent possible, the use of information and documentation already available under the contract management process should be promoted rather than requiring the collection of additional data or documentation.
- **Timed**, i.e. include specific timeframes for completion.

Source: (OECD, 2013<sup>[1]</sup>)

The next section describes how these indicators could be developed.

### *IMSS could build on its recent efforts and transform activity indicators into performance indicators*

IMSS already holds information which could be used to develop indicators to monitor its procurement system. Although the PREI/SAI system is not a reporting tool, each area in IMSS has an application for extracting information. The Coordination of supply Control Area (CCA) already generates some indicators to monitor the national system, such as the share of products and services not awarded, non-compliance indicators and savings.

The dashboard of procurement activities currently being developed (the SEI) will enable IMSS to issue reports against the following indicators:

- Procurement procedures: Which procurement procedures are used by IMSS ?
- Contracts: How was the contract formalised?
- Products and services procured
- Date, year and period of procurement activities (When was it procured?)
- Quantities procured
- Procurement amounts
- Contract years
- Replenishment orders
- Inventories
- Prescription of drugs provided
- Investment levels
- Drug consumption
- Costs

- Number of products and services not awarded
- Supply orders

While providing IMSS with increased visibility on procurement spending and allowing senior management a snapshot of progress, these indicators are mostly activity indicators rather than performance indicators. Currently only two indicators measure the performance of the system: the non-compliance indicator and the savings indicator.

The performance of the procurement system depends on the performance of suppliers. Poor performance can have several explanations, such as the supplier's lack of capacity, or tender documentation which is not aligned with market capacity. To measure the performance of its suppliers, IMSS has developed a non-compliance indicator which can track orders that were delivered only partially and/or late. IMSS's procurement website provides information on "non-compliant suppliers", but only for drugs and healing, radiological and laboratory material. IMSS meets with suppliers who have a high non-compliance rate to reach an agreement or come up with alternative solutions to ensure supply (Chapter 4).

During the fact-finding mission, the pharmaceutical industry shared concerns regarding the fact that IMSS does not always take into account manufacturer's production lead-time which can impact on the effective delivery of medical devices and drugs. Besides ongoing measurement of level of compliance, this indicator could be further exploited to revisit the procurement strategy for upcoming tenders (e.g. by looking at average level of compliance by months, by delivery timeframes, etc...). Decisions based on this analysis could range from implementing a stricter qualification mechanism or setting delivery timeframes that are aligned with market capabilities.

Given today's financial and budgetary constraints, a demonstration of value for money should guide procurement strategies. The performance of the procurement system is often measured through savings made, and IMSS is no exception. There are two ways to measure procurement savings: budgetary savings or performance savings. Calculating budgetary savings involves measuring how much the contracting authority is saving in terms of spent budget from one year to the next. Calculating performance savings looks at the efficiency of procurement while taking into account all financial aspects. One of the main challenges identified in the OECD survey on Centralised Framework Agreements (2015b) was the methodology for calculating this indicator. Indeed, a broad range of calculation methods are applied across OECD countries depending on the nature of contracting mechanisms or the perspective adopted (OECD, 2017<sup>[20]</sup>). Box 3.5 describes the various methodologies implemented in OECD countries.

**Box 3.5. Common methodologies to measure procurement savings in the OECD**

- Comparison between historical prices or reference price based on market analysis and final price proposed by the awarded supplier.
- Assessment of the total cost of ownership of products or services procured, and comparison with reference prices.
- Comparison between the price list proposed by the awarded suppliers in the first competition stage, or the average historical price paid by contracting authorities, and the discounted price obtained after second stage competition.
- Comparison between historical processing or labour costs and new processing or labour costs.

*Source:* (OECD, 2015<sup>[17]</sup>)

IMSS has developed a methodology to calculate performance savings based either on historical prices of recurrent purchases or on reference prices gathered through the market analysis for new products or services. This methodology is similar to the first approach described in Box 3.5 which is common in other countries, yet it doesn't capture additional dimensions such as indirect costs and thus also potential savings. Indeed the evaluation of the cost of a product requires taking into account more than initial price agreed in the contract. For instance, for medical devices, in addition to the price, the analysis could take into account the costs involved throughout the life of the product: maintenance costs, training costs, insurance, as well as indirect costs such as the impact on beds and patients' length of stay and the time needed by medical professionals to use the product or to take care of patients (See Box 2.3). As discussed in Chapter 6, integrating these components into the calculations could provide IMSS with new avenues for generating savings.

Another argument for IMSS to review its methodology for calculating savings is that communication on savings is a powerful tool to reassure stakeholders (employers, the government and taxpayers) of the soundness of IMSS's procurement strategy and to ensure they adhere to it. IMSS has undertaken a significant communication campaign regarding the savings resulting from consolidated tenders. For instance, one webpage is dedicated to this topic. Table 3.3 describes the savings resulting from IMSS consolidated tenders from 2014 to 2017.

**Table 3.3. Savings resulting from IMSS consolidated tenders, 2014 to 2017**

Participants	Savings per year				Total savings	
	2014	2015	2016	2017	Millions USD	%
IMSS	-7%	-9%	-5%	-7%	-467	-8%
ISSSTE <sup>1</sup>	-12%	-12%	-8%	-8%	-181	-11%
PEMEX <sup>2</sup>	-8%	-11%	-9%	-8%	-19	-10%
SEDENA <sup>3</sup>	-7%	-10%	-5%	-9%	-12	-9%
SEMAR <sup>4</sup>	-35%	-6%	-2%	-3%	0	-7%
Total Dependencies	-10%	-8%	-6%	-7%	-679	-8%
Total entities	-19%	-42%	-8%	-5%	-104	-17%
Total institutes	-8%	-28%	-12%	-9%	-4	-20%
Total general	-12%	19%	-6%	-7%	-787	-9%

Notes:

1. ISSSTE: The State's Employees' Social Security and Social Services Institute

2. PEMEX: Petróleos Mexicanos

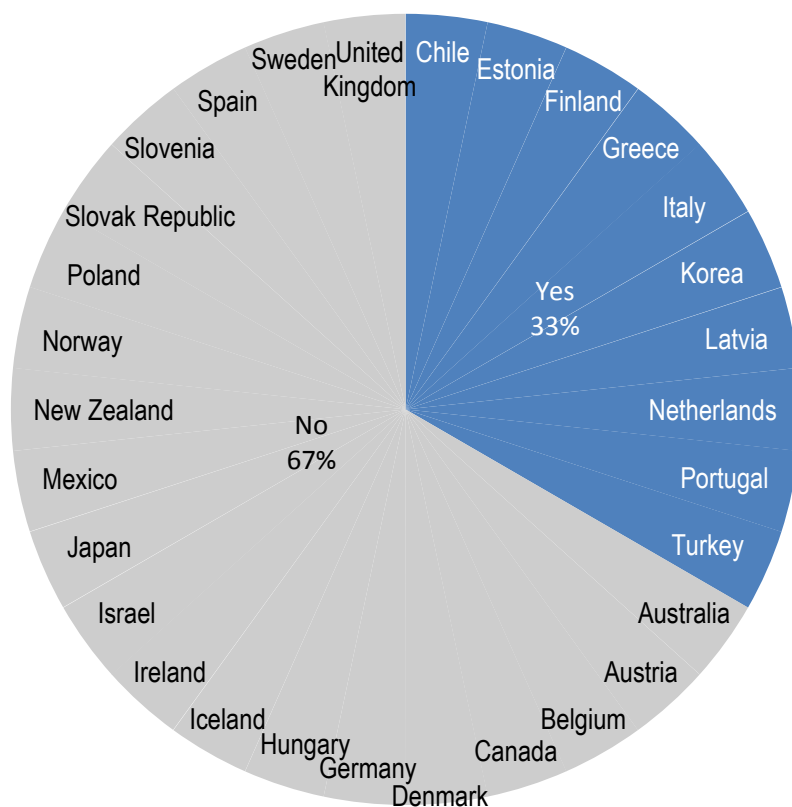
3. SEDENA: The Ministry of Defence (*Secretaria de la Defensa Nacional-SEDENA*)

4. SEMAR: The Ministry of Navy (*Secretaria de Marina-SEMAR*)

Source: (IMSS, 2016<sup>[21]</sup>)

In addition to measuring price and cost savings, savings can also be demonstrated in relation to administrative costs. Procurement tools such as e-procurement, centralised procurement and consolidated procurement can save entities significant amounts in process and productivity costs. However, countries find it challenging to measure the savings and more generally the efficiencies derived from these instruments (Figure 3.8).

**Figure 3.8. Who is measuring the efficiencies generated by the use of e-procurement systems?**



*Note:* Data for the Czech Republic, France, Luxembourg, Switzerland and the United States are not available.  
 Disclaimer: <http://oe.cd/disclaimer>  
 Source: (OECD, 2017<sub>[22]</sub>)

Assessing this type of performance requires information on direct procurement process costs (i.e. procurement officials' salaries and standardised timeframes for each type of procurement procedure). It also requires a harmonised mapping exercise of roles and responsibilities within contracting authorities to ensure that indirect costs, such as hierarchical approvals or budgetary validations, are taken into account.

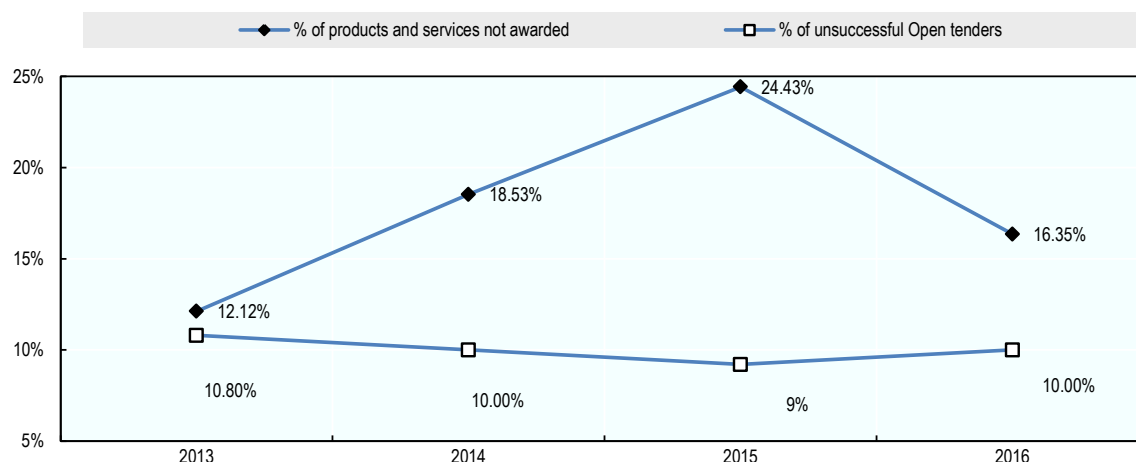
There is no single methodology for measuring the process costs of procurement tools. As one example though, Chile calculates the savings generated by framework agreements by estimating the difference between the costs of issuing a purchase order under a framework agreement, and the costs of issuing an individual public tender or direct award procedure.

IMSS could also develop other indicators to capture various dimensions of procurement performance. For example, the efficiency of the system could be measured by the number or share of unsuccessful tenders or the number of products and services not awarded. These indicators could signal procurement categories in need of capacity building amongst the public procurement workforce or the need for better engagement with the private sector. According to SFP, in 2015 around 10% of IMSS's open tenders and 12.7% of its restricted invitations were unsuccessful (Figure 3.9). The latter statistic signals a



particular need for corrective action since restricted invitations target suppliers based on their assessed capacity.

**Figure 3.9. Share of unsuccessful tenders and share of products and services not awarded, 2013-2016**



Source: Data provided by IMSS and SFP

The share of products not awarded could also signal deficiencies in specific product categories that are ultimately preventing some patients from receiving the medicines they need. Among the reasons for which products or services were not awarded in the 2017 round of consolidated tenders, 55.6% were because no offers had been submitted and 39.4% were for technical reasons (Institute of Research and Pharmaceutical Innovation, 2017<sup>[23]</sup>). This suggests the need for greater understanding of market capacities.

IMSS could also develop an indicator to assess suppliers' level of compliance. IMSS holds information on the effective delivery date of goods and provision of services, as well as the expected delivery date. This information could be used to develop a specific indicator on the relevance of delivery timeframes for each product category, region or supplier. It would help IMSS to optimise its stock management, an aspect which has been identified as a clear area for making savings (Chapter 4). Box 3.6 provides an example from the United Kingdom's National Health Service (NHS), which uses stocks strategically.

### Box 3.6. Strategic stock management by the UK's National Health Service

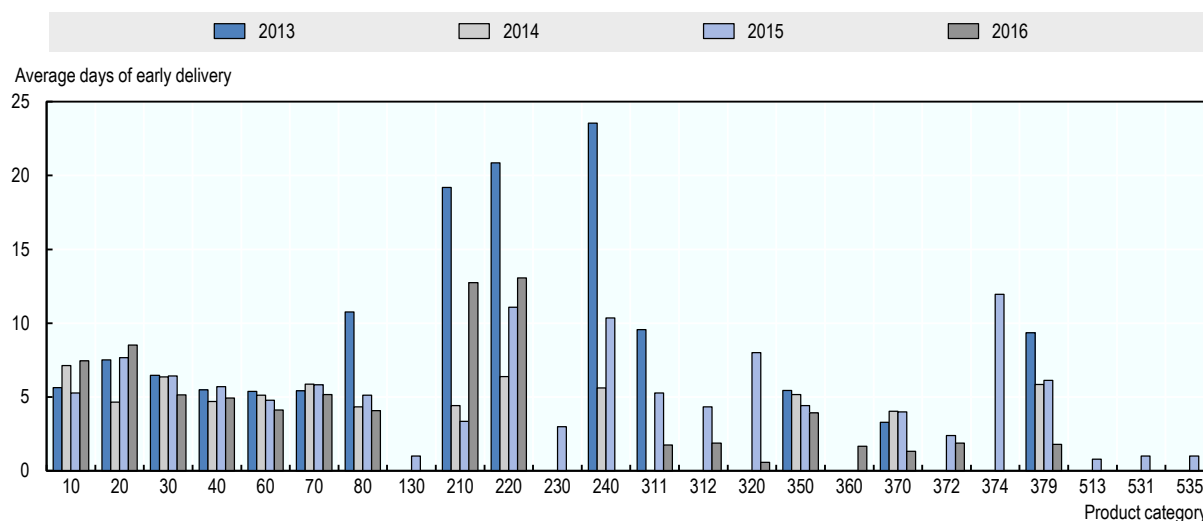
The National Health Service- NHS operates the public health services in the United Kingdom. However, each country – England, Scotland, Wales and Northern Ireland – manages its own healthcare arrangements. NHS England is expected to deliver efficiencies of 2-3% per year, effectively setting a 10-15% real terms cost reduction target for achievement by April 2021. To achieve those targets, efforts need to be devoted to several areas including the optimisation of clinical and non-clinical resources.

For instance, some trusts- entities managing NHS hospital care in England- have developed more efficient centralised arrangements and some are working with pharmacy wholesalers to consolidate buying and reduce the number of daily medicine deliveries to hospitals.

Working more closely with manufacturers and pharmacy wholesalers should lead to consolidation of the medicines supply chain, making full use of e-ordering and invoicing and aggregating and rationalising deliveries – preferably ready for use and to the ward. This would significantly reduce the numbers of daily deliveries to hospitals to less than five, thereby reducing stock holding (a reduction to 15 days would generate a GBP 50 million one-off saving to the NHS per year), as well as reducing pharmacy staff supply chain costs.

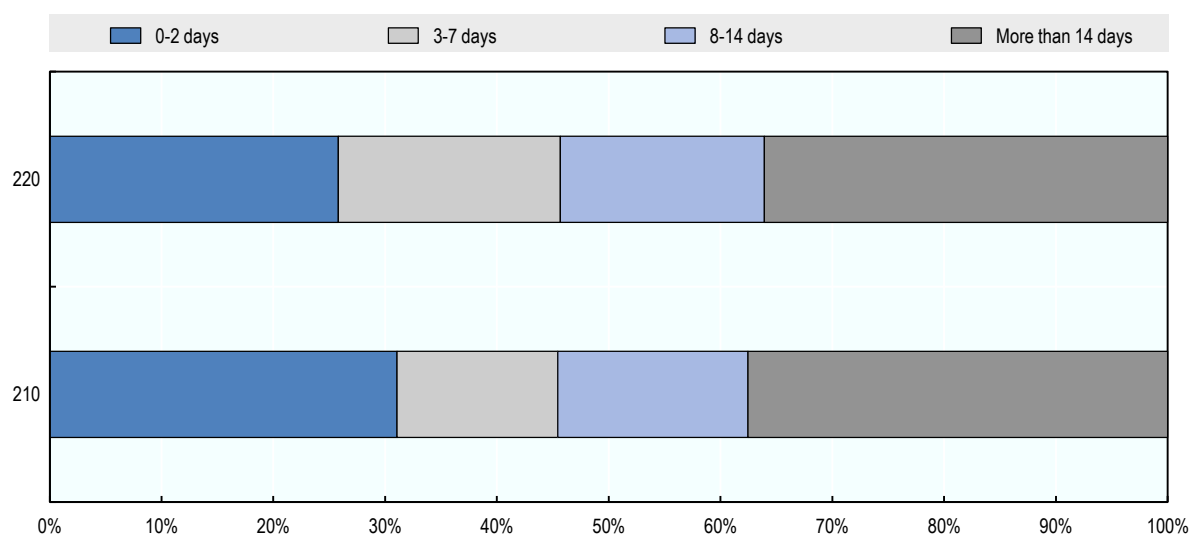
*Source:* (Naylor et al., 2016<sup>[24]</sup>) and (OECD, 2016<sup>[25]</sup>)

Currently, except for vaccines, all drugs have the same delivery terms. However, analysis suggests that different product categories have diverse effective delivery timeframes and some have clear potential to optimise their delivery timeframes (Figures 3.10 and 3.11). For example, as shown in the figures below, products categories including hospital clothing (product category 210) or mattresses (product category 220) experience a recurrent trend of being delivered well ahead of contractual deadlines. A closer alignment of contractual delivery deadlines with recurring practices could further incentivise supplier performance and benefit IMSS stock management.

**Figure 3.10. Early delivery in days per product category**

*Note:* In this calculation, only purchase orders delivered on time were taken into consideration.

*Source:* Based on data provided by IMSS

**Figure 3.11. Advance days for on-time deliveries for product categories 210 and 220 (2016)**

*Note:* The composition only refers to the deliveries that were made on time. Thus, non-compliant deliveries were not taken into account in the calculation

*Source:* Based on data provided by IMSS

The performance of a procurement system can also be measured by how easy it is for suppliers to access procurement opportunities. The ideal performance indicator on facilitating access would be the number of bids measured against the number of economic operators in the respective market. Although this exercise might prove challenging because it will require the identification of all potential suppliers at the national level but

also at the international level, IMSS could still measure the level of effective competition or possible barriers to competition by excessive specifications by measuring several indicators such as the number of qualified bids, the number of suppliers downloading or requesting tender documents and the number/share of bids not awarded.

For instance, in a tender for pharmaceutical and medical goods (LA-019GYR047) divided into 12 lots, 22 suppliers participated in clarification meetings and were interested in submitting a bid; 13 suppliers actually submitted a bid, with an average of 3 supplier per lot; 2 lots were not awarded and the same suppliers won half of the remaining lots. IMSS could consider using this type of analysis to assess the level of competition in its tenders and design specific strategies accordingly. For example, this analysis could signal various areas for improvement in the procurement process, ranging from the coherence and stability of the procurement framework to the clarity and complexity of tender documentation and the limitations of single source procurement.

***Impacting on healthcare delivery, IMSS could further assess the performance of its procurement system against broader objectives***

Given that IMSS is such a major actor in the health system, it could also assess its procurement performance against national objectives. Communicating the results could further reinforce its strategic position. IMSS has developed two sets of indicators which can be used to measure the efficiency of the procurement process directly or indirectly: (1) indicators on the quality of services provided by IMSS; and (2) prescription indicators. Since 2009, IMSS has run a National Satisfaction Survey to gather information on the perceptions of the quality of services provided by IMSS to its affiliated beneficiaries. The most recent survey took place in April 2017 and had 24 757 respondents. This survey was designed to measure ten indicators which are developed at the national level and at the delegations and UMAEs level:

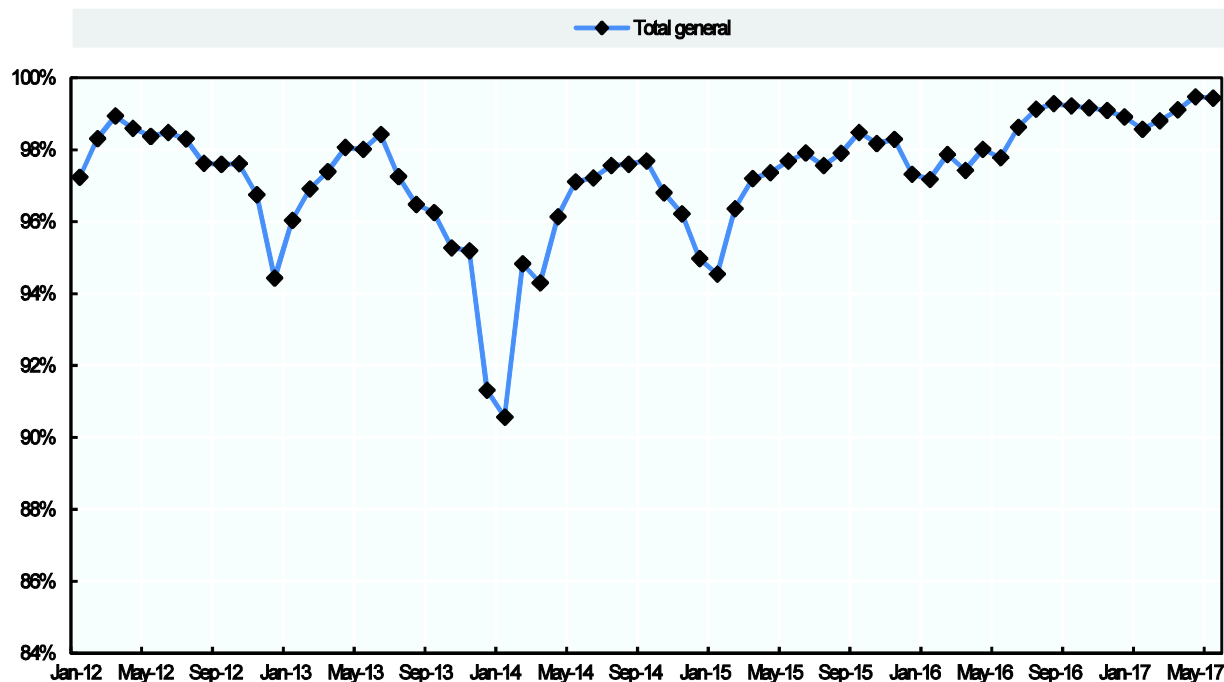
1. General satisfaction with the medical care
2. Provision of drugs to patients
3. Treatment received during the visit in the unit
4. Average score of the treatment received by different categories of personnel
5. Waiting time for medical consultation
6. Cleanliness of the unit
7. Cleanliness of the bathrooms
8. Evaluation of the emergency service
9. Hospitalization services
10. Surgery services

Some of these indicators reflect the performance of the procurement system. Table 3.4 provides examples of possible links between the indicators and IMSS procurement performance. IMSS could consider using these indicators to tailor specific procurement strategies further so as to enhance the satisfaction of IMSS affiliates.

**Table 3.4. Examples of links between satisfaction indicators and procurement performance**

Satisfaction indicators	Possible impact of procurement
Provision of drugs to patients	Supply disruption of drugs Lack of effectiveness of drugs prescribed
Cleanliness of the bathrooms/cleanliness of the unit	Bad quality cleaning products procured by IMSS (cleaning services are provided by IMSS personal)
Evaluation of the emergency service	Supply disruption of drugs Lack of medical consumables and devices

In addition, IMSS uses another indicator related to medicine prescriptions. As needed, doctors prescribe medicines to patients following a consultation. These drugs should be provided by IMSS pharmacies. The prescription indicator aims to measure the percentage of prescriptions for drugs that have been totally or partially provided to patients. Tracking this indicator shows a clear drop in performance at the same time each year (December-January; Figure 3.12). This might be explained by the procurement planning calendar, in which all contracts should in principle be awarded before the end of the year, as well as the relatively high share of products and services not awarded. This indicates that products and services like drugs are often not being made available on time. IMSS should develop a specific strategy to overcome this issue.

**Figure 3.12. Share of drug prescriptions that are fulfilled, 2012-2017**

Source: data provided by IMSS

## Proposals for action

IMSS plays a pivotal role in the national health system. As a health provider, the entity needs to procure goods and services which could impact the quality of health service provided by the entity. Therefore the entity needs to rely on comprehensive information to inform its procurement decisions. Building on efforts made by IMSS since the last review, the institute could further improve the use of its information systems and develop data collection methodologies supporting the definition of future procurement strategies. To this end the OECD is providing IMSS with recommendations covering three main areas: the digitalisation of the procurement system through internal and external platforms, the use of market intelligence and the demonstration of the added value and impact of procurement strategies.

### *Digitalise procurement to increase efficiency*

- Use existing information systems to further streamline procurement operations:
  - introduce e-submission in all IMSS procurement procedures to enhance data quality and inform public procurement decisions
  - bring IMSS's information system in line with the legal framework
  - add notifications into IMSS's IT system for relevant stakeholders involved in the procurement process
- Assess periodically the alignment of IMSS's IT systems with its procurement strategies
- Develop mechanisms and a platform to share information among procurement officials.

### *Use procurement intelligence to help IMSS implement its strategies*

- Reinforcing the methodologies to capture decentralised needs supporting the design of centralised procurement strategies by considering demand analysis as a strategic task and not as an administrative task.
- Review the methodology for consolidated tenders to find synergies among IMSS entities and promote joint procurement activities.
- Improving the understanding of market capabilities to reduce information asymmetry and increase the outreach of IMSS procurement opportunities by:
  - establishing more regular dialogue with the private sector
  - improving the methodology and the organisation of market analysis
  - increasing the publication of draft tender documents
  - improving the information for suppliers on the IMSS its website
- Support decentralised pre-tendering activities and shared market research to ensure coherent approaches and communication across the various IMSS entities.

### *Demonstrate the added value and impact of procurement strategies*

- Improve data structure and quality to generate structured and useful data for informing procurement decisions
- Enhance officials' capacity in entering data on external platforms to improve the quality of data for internal and external stakeholders.
- Develop procurement performance indicators from existing data and by improving the methodology to calculate savings.

- Assess the performance of IMSS's procurement system against broader objectives by using health performance indicators, and tailor specific procurement strategies accordingly.

## Note

<sup>1</sup> At an exchange rate of MXN 18.07 to USD 1.

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