OECD Public Governance Policy Papers

Public procurement performance

A framework for measuring efficiency, compliance and strategic goals

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Public procurement accounts for 13% of GDP in OECD countries. Pressures on public spending – as well as the need for greater accountability, better monitoring of public policies, and more effective risk management – have made it increasingly important to measure the performance of public procurement. However, many countries still have not established a formal performance management system with key performance indicators. This paper provides a comprehensive, ready-to-use performance measurement framework for the consistent assessment of procurement processes. The framework should also support data-based policy- and decision making in public procurement.

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1 Introduction

Public procurement is an important tool for providing public services to citizens and businesses. From an economic perspective, it contributes to an efficient and effective management of public resources (OECD, 2015[1]). Beyond the economic aspect of achieving "value for money", procurement has been increasingly used strategically – through deliberate choices of how to spend taxpayers' money and provide public services -to achieve strategic policy objectives, such as mitigating climate change, supporting innovation or social inclusion.

To achieve these strategic objectives, countries employ specific strategies, tools and mechanisms throughout the public procurement cycle. Measurement frameworks are essential to i) assess progress and achievements periodically and consistently and ii) identify any gaps in progress against objectives and targets. Such frameworks will enable governments, contracting authorities and other stakeholders to use the data to take action and/or to tailor specific strategies. The OECD *Recommendation on Public Procurement* highlights the need to drive performance improvements by evaluating the effectiveness of the public procurement system, from individual procurements to the system as a whole, at all levels of government, where feasible and appropriate (OECD, 2015[1]) (see Box 1.)

Box 1. The principle on Evaluation of the OECD *Recommendation on Public Procurement*

i) Assess periodically and consistently the results of the procurement process.

Public procurement systems should collect consistent, up-to-date and reliable information and use data on prior procurements, particularly regarding price and overall costs, in structuring new needs assessments, as they provide a valuable source of insight and could guide future procurement decisions.

ii) Develop indicators to measure performance, effectiveness and savings of the public procurement system for benchmarking and to support strategic policy making on public procurement.

Source: (OECD, 2015[1])

Performance (i.e. the ability of completing a determined goal or objective) evaluation is usually conducted by defining key performance indicators (KPIs) that are monitored over time. While the relevance of measuring performance is clearly recognised, practice often lags behind. Only 45% of respondents to the 2018 survey on the implementation of the 2015 OECD *Recommendation of the Council on Public Procurement*[1] mentioned the establishment of a formal performance management system with KPIs (OECD, 2019[2]). Nevertheless, in practice, many countries must report on a number of established KPIs.

[1] Data gathered from 33 respondents (30 OECD countries plus Morocco, Costa Rica and Peru).

Various attempts have been made by the OECD to develop a public procurement measurement framework; however different challenges were identified such as the lack of flexibility, the lack of adaptability to countries' context and the lack of data.

The pressure on public spending, as well as the need for more accountability, for monitoring the achievement of public policies, and for better managing public procurement risks, all make the need for better measurement in this area more urgent. This is particularly relevant in the aftermath of COVID-19, given the strategic role that public procurement is playing in the recovery phase.

Considering that "if you can't measure it, you can't manage it" (World Bank, 2014[3]), this paper provides a comprehensive, ready-to-use performance measurement framework for consistently assessing procurement processes and supporting data-based policy and decision making in the public procurement field.

Other methodologies, such as the Methodology for Assessing Procurement systems (MAPS) (MAPS initiative, 2018[4])and the public procurement indicators of the SIGMA public administration principles (SIGMA, n.d.[5]), assess public procurement at the systemic level. For instance, MAPS assesses the quality and effectiveness of public procurement systems. The resulting assessments highlight where reforms are most needed and indicate how reforms can be best carried out. Neither MAPS nor the public procurement indicators of the SIGMA public administration principles, however, seeks to assess the performance of procurement procedures on a regular basis. As such, these methodologies and the measurement framework presented in this paper complement each other; in particular, data from the measurement framework can be used in MAPS assessments as evidence. For this reason, the measurement framework establishes likely contributions between its indicators and the MAPS.

Given institutional and regulatory differences across countries, the proposed framework is designed to be flexible, customisable, and scalable, depending on the needs of the country or organisation wishing to use it. The measurement framework:

- Assesses the performance of public procurement at three levels focusing on procurement procedure (tender level, contracting authority level and national level), depending on the existence of data and possibility to aggregate them.
- Identifies three categories of indicators, related to compliance, efficiency and achievement of strategic objectives.
- Covers the whole procurement cycle (from planning to contract management).
- Can be used by different stakeholders (contracting authorities, procurement authorities, central purchasing bodies, etc.).

The performance measurement framework is also designed to be aspirational and forward-looking, i.e. it could inspire countries to deepen their work in certain areas of public procurement.

The paper presents the elements to consider when developing and establishing public procurement measurement frameworks. It then provides a detailed description of the proposed framework. Given the key role of data in public procurement measurement frameworks, the paper ends with a discussion of the availability and access of relevant quality data.

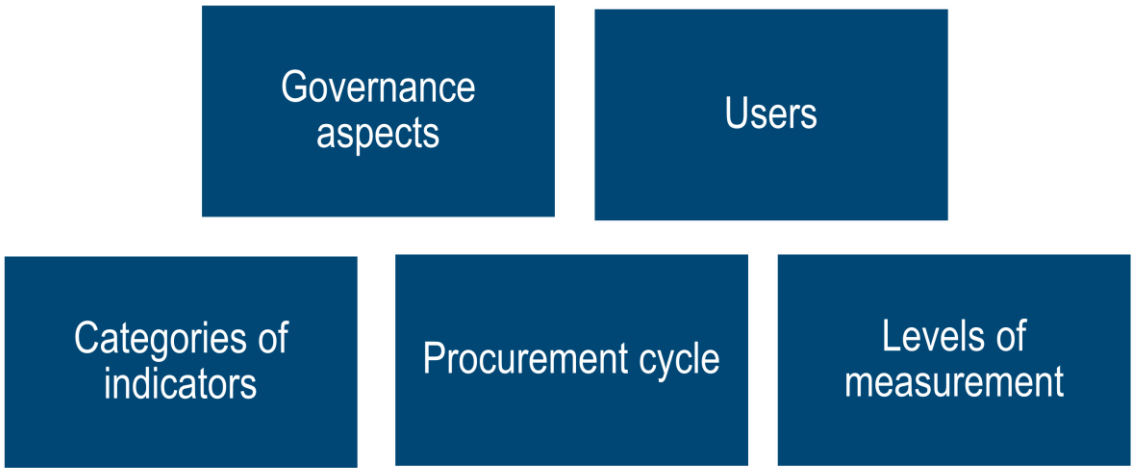
2 Setting up an effective performance measurement framework

The OECD *Recommendation on Public Procurement* calls for developing indicators to measure performance, effectiveness and savings of public procurement systems to benchmark progress and support strategic policy making on public procurement (OECD, 2015[1]). All public procurement performance measurement frameworks should not only assess progress and achievements, but also identify potential gaps where improvement can be made.

A series of considerations emerged when setting an effective performance measurement framework, starting with the governance of such framework. This includes questions related to leadership, capacity, data, implementation plan, etc that are required to ensure proper implementation. In addition, to be fully comprehensive, the measurement framework should:

1. Ensure the measurement of the performance of public procurement at different levels (from the tender level to the national level);
2. Cover different categories of indicators, in relation to public procurement objectives (e.g. efficiency/effectiveness, compliance, and public policy ones);
3. Cover the whole public procurement cycle;
4. Be useful and tailored to different relevant stakeholders of the public procurement system (e.g. procurement authorities, contracting authorities or central purchasing bodies - CPBs, etc.).

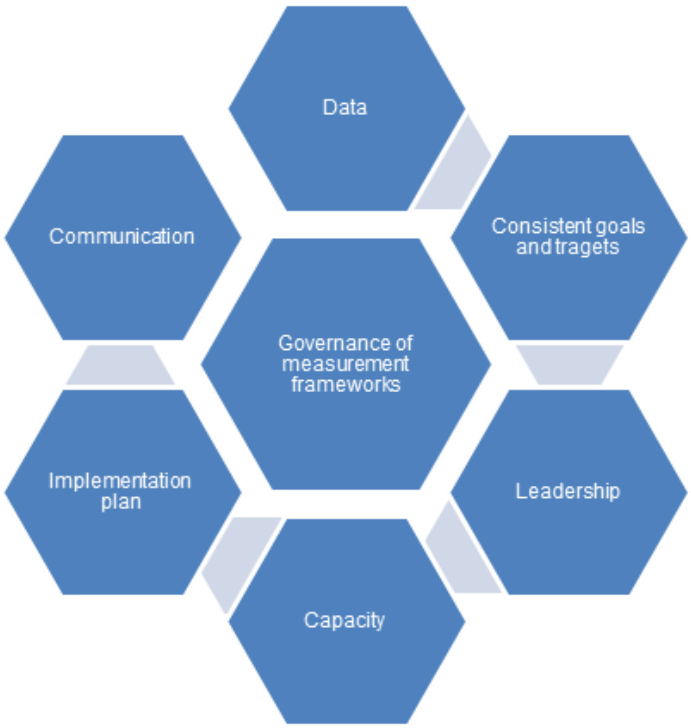
Figure 1. Elements to consider when developing and establishing measurement frameworks



2.1. The governance of public procurement measurement framework

To embrace the benefits of establishing a public procurement measurement framework, the following elements could be considered from a governance perspective, including: i) setting consistent policy goals, objectives and targets, ii) assigning the responsibility for the development and implementation of the procurement measurement framework (leadership), iii) reinforcing the capacity of the procurement workforce in this area, v) communicating on the results of the measurement framework, iv) defining a clear implementation plan, and v) ensuring the availability of useable quality data. All these elements are developed below, and the last element will be developed in section 4.

Figure 2. Governance of measurement frameworks



First of all, developing KPIs requires setting consistent policy goals, objectives and targets for public procurement systems. Without this, it will not be possible to identify gaps and areas of improvement. For instance, the Slovak Republic set a target of minimum 6% of tenders that need to include social elements for all contracting authorities (OECD, 2021[6]). For the year 2021, the French CPB UGAP (Union des groupements d'achats publics) had set specific targets: 3% of savings, 21% of contracts with SMEs and 76% of contracts with social and/or environmental elements (UGAP, 2021[7]). Without such clear goals, it would be difficult for contracting authorities to assess their level of compliance with the public procurement framework or with internal targets. It is worth mentioning that some indicators are informative and not related to specific targets., For instance, there is no specific target for the indicator on the share of "challenged public procurement procedures". However, the interpretation of this this indicator depends on the context of each country. For instance, a high share of challenged public procurement procedures can signal a well-functioning remedies system and trust on the public procurement system. On the other hand, it can also highlight capacity issues related to that public procurement system.

At national level, identifying the entity or entities in charge of monitoring public procurement activities and the procurement system is a fundamental initial step. One of these entities should lead the development of the measurement framework and its implementation. Indeed, a comprehensive monitoring should include any systematic observation of the public procurement system that is conducted, in order to assess

the way in which the development and functioning of the system contributes to attain t the desired (targeted) state of play, as defined by policy makers through establishing KPIs (OECD SIGMA, 2016[8]). . Monitoring public procurement is considered as a core function in the organisational structure of public procurement functions (OECD SIGMA, 2016[8]). Ideally, a harmonised measurement methodology should be provided at the national level. While some national procurement measurement frameworks might not be comprehensive, specific contracting authorities can go above the national requirements to assess the performance of their procurement by setting additional KPIs. Whether at the national or entity level, it is pivotal to identify the entity (when at the national level) or the department (when at the entity level) in charge of providing guidance in this area.

When establishing a measurement framework, one should think about the human resources available and the capacity of procurement professionals to conduct performance measurement. Aware of the key role of measurement frameworks on public procurement outcomes, several public procurement competency frameworks, such as the ones of the European Commission (ProcurComp EU), Chile and Peru, included "performance orientation" as a relevant competence (OSCE, 2019[9]) (ChileCompra, 2022[10]). On the other side, selected contracting authorities in Malta mentioned in interviews conducted by the OECD the lack of capacity of procurement officials (knowledge and time) as one of the main challenges for not using KPIs in interviews conducted by the OECD (OECD, 2023[11]).

Another challenge identified by the OECD is the perception that performance indicators do not bring value added to the procurement system. Therefore, communicating around the benefits of establishing a procurement measurement framework would help to infuse a performance orientation culture. Furthermore, communicating the results of measurement frameworks internally and when relevant externally is also essential to foster transparency and accountability. This could be through an annual report (OECD SIGMA, 2016[8]) or a dedicated website with relevant data and KPIs (OECD, 2021[6]).

Lastly, considerations regarding the timeline for implementing a measurement framework should be taken into account. When establishing a comprehensive measurement framework, countries can adopt different strategies for its implementation. For instance, a country can decide to start with a specific procurement stage, or to start with specific categories of procurement indicators. It is also critical to consider the needs of the particular user of the indicator framework, i.e. either a contracting authority, a national procurement authority or a CPB. Each of these users may have a different perspective on what types of performance is relevant for them, and hence which indicators to focus on (OECD, 2023[12]).

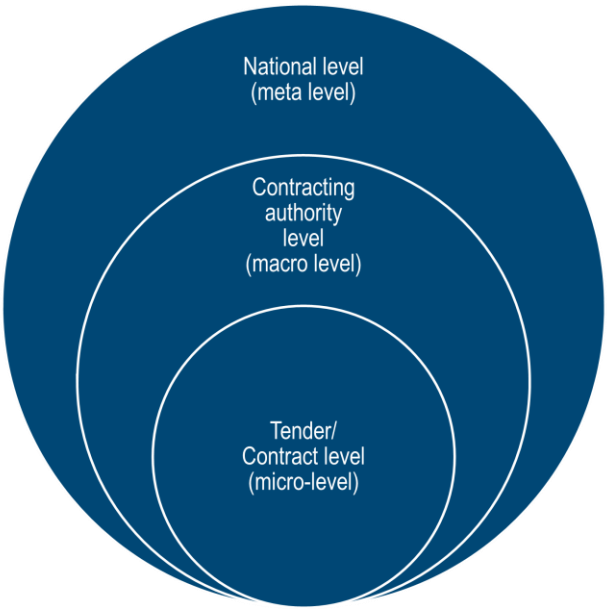
2.2. Measuring the performance of public procurement at different levels

The performance of public procurement systems can be assessed at three levels: at the tender/ contract level (micro-level), at the contracting authority level (macro level) and at the national/system level (meta level) (see Figure 3).

National (meta) level refers to the assessment of the performance of the national public procurement system as a whole. Contracting authority level refers to the assessment of the performance of the public procurement entities in the effective implementation of their operational goals and strategies as well as in their decision-making processes. Lastly, the tender or contract management level refers to the assessment of the performance of an individual contract or tender (OECD, 2016[13]).

There are clear linkages between these three levels as in many cases the lower level is feeding the upper one (OECD, 2018[14]). However, some indicators might only exist for a certain level. For instance, indicators on the number of staff that received capacity building activities only exists at the contracting authority level.

Figure 3. Three levels for assessing the performance of public procurement



Source: (OECD, 2018[14])

2.3. Different categories of procurement performance indicators

Public procurement refers to the process of identifying what is needed; determining who the best person or organisation is to supply this need; and ensuring that what is needed is delivered to the right place, at the right time, for the best price and that all this is done in a fair and open manner. It is increasingly considered as a crucial pillar of service delivery for governments. Because of the sheer volume of spending it represents, well-governed public procurement can and must play a major role in fostering public sector efficiency, establishing citizens' trust and advancing the government's agenda. This involves different objectives including compliance, efficiency and strategic ones (OECD, 2015[1]). As such, the three objectives of compliance, efficiency and contribution to governments strategic objectives are key elements of the performance measurement framework presented in this paper.

Figure 4. Three categories of public procurement performance indicators

Compliance KPIs aim at assessing whether procurement processes and outcomes are in line with the national or any other applicable legislation including on integrity and competition laws. In this context, compliance KPIs could be divided into different sub-categories throughout the procurement cycle, such as publication/transparency requirements, ex-ante control / audit findings, sanctions, integrity matters, appeals/litigation, and compliance with payments delays.

Efficiency KPIs aim at assessing whether the procurement processes enable to achieve the best procurement outcomes and effectiveness as well as the best "value for money". Efficiency can be commonly defined as a ratio between outputs and inputs while effectiveness is the ratio of defined outcomes to defined inputs and is conditional on the quality of service provision (OECD, 2019[15]). For instance, KPIs could cover savings (in monetary value and time), level of market participation in specific procedures, duration of procurement processes (including the tender evaluation phase), etc. In addition to general efficiency indicators such as those aiming at assessing the competition level, this category could be divided into different sub-categories including the planning of procurement activities, the implementation of different efficiency tools such as framework agreements or Dynamic Purchasing Systems (DPS), contract modification, professionalisation issues and payment considerations.

Strategic KPIs aim at assessing how public procurement processes and outcomes contribute to achieving strategic policy goals set-up by governments such as mitigating climate change, promoting innovation, creating jobs, social aspects of sustainability (i.e. human rights including labour rights, consideration of gender concerns or inclusion of vulnerable groups, etc.) or the development of small and medium enterprises (OECD, 2015[1]). In this context, KPIs could include the share of sustainable goods and services, the share of procurement awarded to SMEs (in number and volume), or the share of procurement involving innovation features. In addition, in mature systems, KPIs could capture the impacts of strategic procurement, such as the reduction in CO2 emissions or energy consumption. The different sub-categories of this category of KPIs could reflect the different policy objectives (i.e. Green Public Procurement, Social considerations, SMEs and innovation). It is important to highlight that some policy objectives have impact that goes beyond national boundaries. When possible, the public procurement measurement framework should consider impact within the country but also beyond. For instance, when it comes to CO2 emissions, it could be relevant to consider emissions throughout supply chains from row material to the final consumption of products.

2.4. Indicators covering the whole procurement cycle

Performance indicators should be related to different stages of the public procurement cycle from tender preparation to the completion of the contract. Indeed, each phase and activity of the procurement cycle is related to an objective to achieve. Therefore, each activity can be associated with specific indicators (HAICOP, 2019[16]; OECD, 2023[17]). Furthermore, different procurement activities are under the responsibility of different officials and/or teams. In addition, establishing a measurement framework that covers the whole procurement cycle can provide a solid input when undertaking risk management assessments (OECD, 2023[18]). Figure 5 provides an example of some performance indicators throughout the procurement cycle.

Figure 5. Examples of performance indicators throughout the procurement cycle

2.5. Indicators relevant for different procurement actors

In addition to the procurement cycle, another critical aspect of the performance measurement framework is related to the national institutional context in which it is implemented. In its conception, the framework considers various institutional actors as potential 'users' with each different perspective and potentially different focus points when measuring performance. In essence, the framework considers three types of entities using the framework: i) national procurement authorities such as public procurement authorities or oversight bodies, ii) contracting authorities, and iii) CPBs. Each of these entities would typically look at performance from its vantage point and focus on different aspects.

Depending on which type of user is implementing the framework, the kinds of information that are relevant for performance assessment of the procurement system may vary. A national body typically seeks comprehensive information about the performance of the system as a whole, while a contracting authority has mostly an interest in understanding the performance of its own procurement activities. Although, CPBs can have similar processes to contracting authorities, their aggregation role, and the sheer volume of procurement they cover supports the need to develop additional indicators tailored to their mission. Table 1 summarises the main objectives of the measurement framework depending on its users.

Table 1. Objective of measurement framework per user

Users	Objective of the measurement framework
National Authorities	• Assessment of the performance of the national public procurement system
Contracting authorities	• Assessment of the performance of individual tenders/ contracts • Assessment of the organisational performance of the entity
CPB	• Assessment of the performance of individual tenders/ contracts • Assessment of the organisational performance of the entity

3 Description of the measurement framework

3.1. General description of the public procurement measurement framework

Considering the above, the proposed indicator framework is highly flexible and adaptable to the individual needs of a country, a contracting authority or a CPB, as it offers a wide range of angles for assessment. It serves as a guidance on aspects that could be taken into consideration when conducting the assessment of the performance of a public procurement system or an individual contracting authority including CPBs. Annex A provides a detailed description of the framework.

The framework consists of a total 259 indicators divided into the three categories/dimensions of indicators: compliance, efficiency and strategic objectives. As indicated in Figure 6, the efficiency dimension has 128 indicators, while compliance and strategic procurement account for 68 and 63 KPIs, respectively. Some indicators in the framework have sub-indicators, i.e. suggested breakdown for an indicator[2]. It is worth mentioning that the framework does not aim at scoring or weighing indicators.

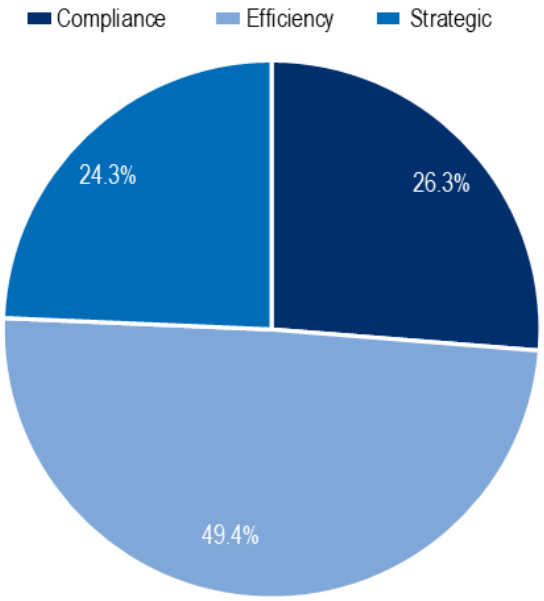
Figure 6. Indicators constituting the performance measurement framework

Category	Total indicators	Number of single indicators	Number of indicators with sub-indicators	Number of sub-indicators
Compliance	**68**	49	10	32
Efficiency	**128**	119	3	13
Strategic	**63**	63	0	0
Total	**259**	231	13	45

Overall, indicators in the efficiency category make up 49.4% of indicators in the framework, followed by 26.3% of indicators in compliance and 24.3% in the strategic category (Figure 7.).

[2] The number of total indicators identifies indicators and respective sub-indicators, while the number of single indicators counts only indicators. The compliance and efficiency categories have 10 and 3 indicators with sub-indicators, respectively. In contrast, the strategic category does not include any indicator with sub-indicators. In total there are 32 sub indicators for the compliance category and 13 for the efficiency category.

Figure 7. Share of total number of indicators by category



Note: Data refers to total indicators

The framework describes and categorises each indicator in detail, according to a number of parameters, such as the procurement stage, the sub-category of indicator, the metric description. For instance, each KPI is assigned to a broader category that helps readability and guide users to areas they consider most relevant. Additional information is defined per each indicator, such as calculation requirements or potential data sources. Table 2 provides a brief description of all elements that constitute the performance measurement framework.

Table 2. Parameters describing each KPI

Column	Description
Sub-Category	Each indicator is assigned to a relevant Sub-category /theme. For instance, the compliance category is divided into several sub-categories such as "publication/ transparency" or "sanctions". This facilitates the readability of the framework and guides users to their priority areas.
Type of user	This column describes for which type of user the indicator is mostly relevant, i.e. whether an indicator is categorised as national authority (NA), contracting authority (CA) or national authority/ contracting authority (NA / CA) -level. Users can filter indicators based on this categorisation.
Indicator (Name)	The name of the indicator, indicating its basic description.
Sub-indicator (if applicable)	Where relevant, an additional break down of an indicator.
Procurement stage	Each indicator is categorised according to the stage of the procurement cycle at which it is being measured (pre-tendering, tendering, contract management).
Metric description	A more detailed description of the indicator.
Core vs Aspirational	This column indicates if the indicator is considered by the framework as a core indicator or an aspirational one. This classification is further discussed in the section "Categorising core vs. aspirational indicators".

Level of data (tender level / contract, CA specific, national)	This column indicates whether the data is extracted from a tender, the contracting authority, or national systems. This categorisation helps users in identifying data needs and gaps when setting up the framework.
Calculation/ Data requirements	For each indicator, a calculation formula is provided. The formula is based on required data points.
Data points	The data points required for the calculation of the quantitative indicator are provided. With this information users can identify unique data points for the calculation of indicators.
Available data (Yes/No)	In this part of the framework, users can indicate whether data to produce the indicator is already available or not. This allows to identify data gaps. Data availability is context-specific.
Data source	The framework indicates the potential source where data can be found (e.g. e-procurement system, internal system of contracting authorities, etc.). This may vary from country to country.
Digital format of the data (Yes/ No/ Partially)	In this part of the framework, users can indicate if the data to produce the KPI is qualitative and available in digital and useable format. This allows to identify data gaps. The digital format of data is context-specific. This topic is further detailed in section 4
Contribution to MAPS indicator (indicator number/No)	The framework identifies which indicators have a specific relationship or contribution to MAPS indicators (Methodology for Assessing Procurement Systems). For countries undertaking this assessment, this information can be helpful to align the performance measurement framework with international tools and standards to assess procurement systems.

Annex A provides a detailed description of the framework and includes all the parameters described in the table above except “Available data (Yes/No)”, “Data source”, “Digital format of the data (Yes/ No/ Partially)”, which will depend on each user of the framework.

3.2. Identifying the type of users for each indicator

The framework captures user perspectives when defining KPIs. As described in Table 1, the framework identified three types of users. Each indicator might be relevant for different types of users. Therefore, the framework categorises KPIs according to the relevant user: i) national authority (NA), ii) contracting authority (CA), and iii) national authority / contracting authorities (NA/CA) and iv) CPBs.

Some indicators are flagged as **‘national authority**’ (NA) indicators, meaning that these indicators can be used for assessing the performance of a public procurement system at national level. As such, they are typically relevant for a national body such as national procurement authorities in understanding key aspects of the procurement system. In terms of data source, these indicators rely mostly on information from the procurement system. Indicators may also come from data gathered from contracting authorities. For instance, an example of a NA indicator in the compliance dimension is “Existence of procurement data in open format” or “Number of conflicts of interest identified by competent authorities”.

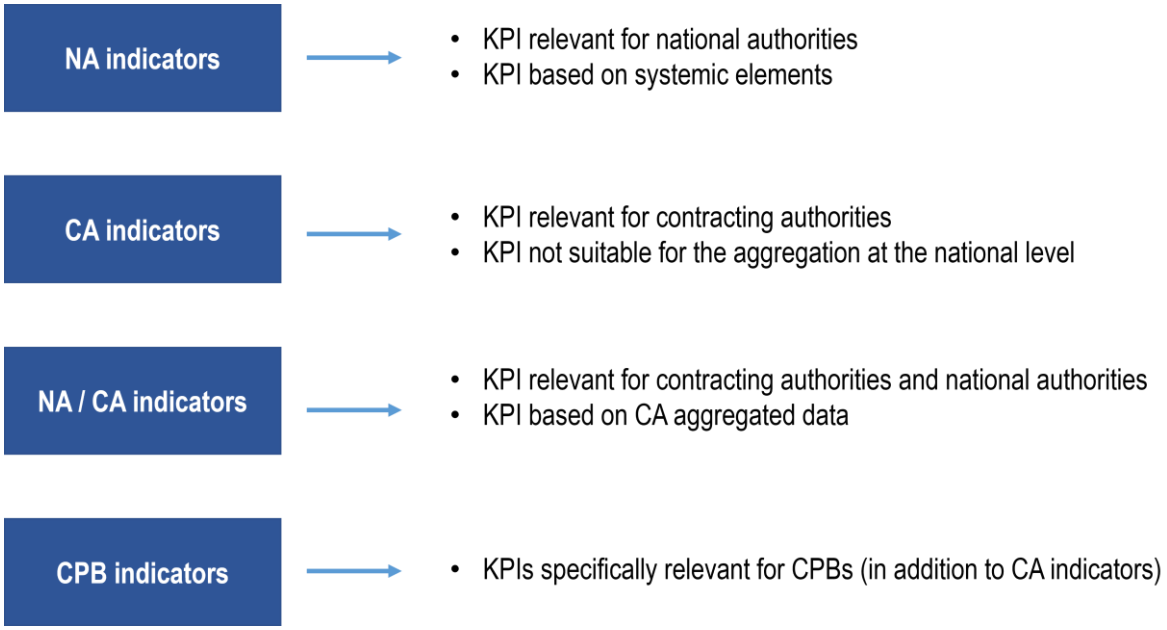
Other indicators are marked as **contracting authority** indicators (CA-indicators), meaning that the indicator can be used for assessing the performance of an individual contracting authority. These indicators highlight information that is relevant for a contracting authority, but may not be suitable or may be overly cumbersome for aggregation at national level. This may entail data that contracting authorities may wish to analyse only internally as it does not impact outputs but rather “inputs” (operational performance). For instance, these indicators could cover issues related to the cost and time of preparing a procurement procedure that might assess the operational performance of a specific contracting authority. However, it does not impact procurement outputs and outcomes. CA-indicators are based on the aggregation of tender data.

The majority of indicators have a double-function as ‘**national authority / contracting authority** (NA / CA)’ indicators. This means that these indicators exist at the CA level and have relevance both applied to an individual contracting authority, but also when aggregated at the national level. In most cases, data for

these indicators is derived from individual tenders. For instance, the KPI “share of competitive procedures with a single bid” provides information both for an individual contracting authority, but also when aggregated at national level. However, in some cases the indicators are not derived from the tender level, but from the CA level. For instance, the indicator on the “share of audit recommendations from external audit implemented” is an indicator that is provided at the CA level and that can be aggregated at the national level.

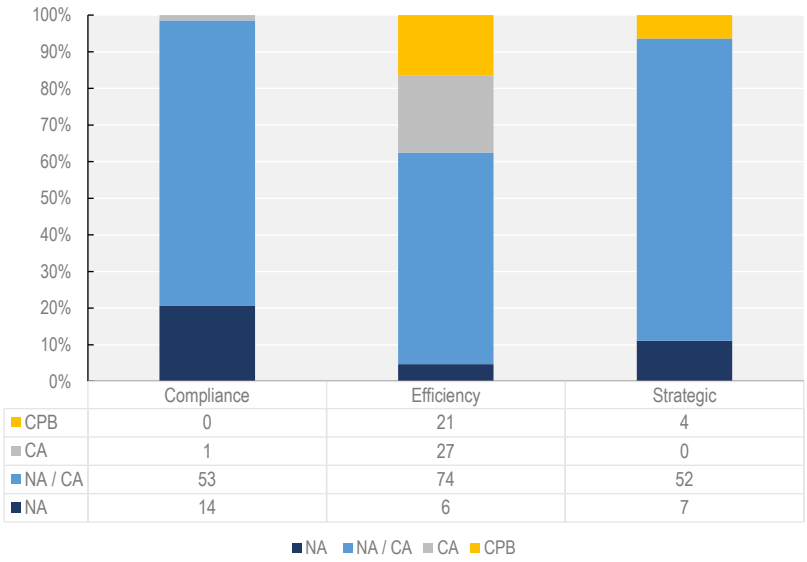
A set of indicators are designated specifically for **CPBs**. These indicators expand on aspects that are mostly relevant for centralised purchasing bodies. Namely, these KPIs are divided between the efficiency and strategic categories, and they focus on general CPB performance, business intelligence, economic contribution of centralised purchasing, performance of strategic public procurement and level of digitisation. They are meant to complement the indicators for contracting authorities, and do not replace them, meaning that CPBs can apply both indicators for CA and CPBs.

Figure 8. Indicators by type of user



It should be noted that the distribution of these indicators varies by category, as shown in Figure 9. Namely, NA-based indicators are more prevalent for the compliance category, while the efficiency category shows a relative higher share of indicators relevant for CAs and CPBs. Finally, NA/CA form the vast majority of indicators for all three categories demonstrating that in most cases information relevant about the performance of individual contracting authorities can provide value at national level when aggregated.

Figure 9. Share of indicators of users by category



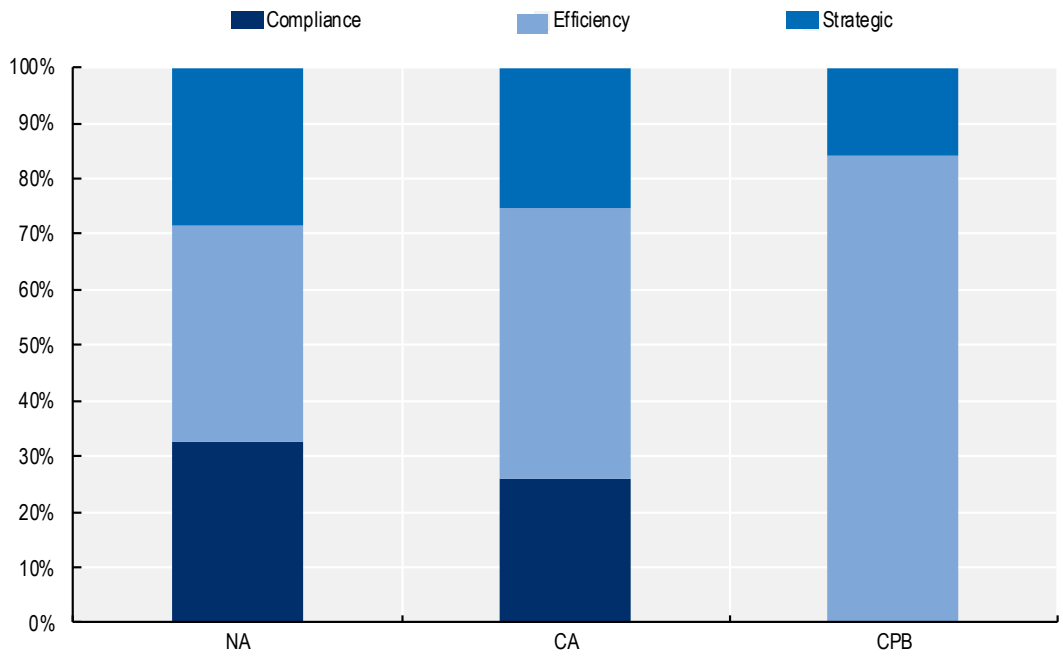
	Compliance	Efficiency	Strategic
CPB	0	21	4
CA	1	27	0
NA / CA	53	74	52
NA	14	6	7

Note: Data refers to total indicators

One could think that NA have an increased focus in compliance indicators. However, as shown by the framework, the assessment of performance of the procurement system by national authorities could be equally balanced across the three categories of compliance, efficiency, and strategic indicators (see Figure 10). KPIs dedicated to CA also have a somewhat balanced focus across the three categories, with a higher focus on efficiency. This is in line with the role of contracting authorities to ensure not only the compliance with the regulatory framework but also the efficiency of public spending.

CPBs do not have specific indicators on the compliance category, because these are already covered as part of CAs indicators. As indicated above, relevant indicators for CPBs include not only the CPB-specific ones but also the CA ones.

Figure 10. Share of indicators by type of users



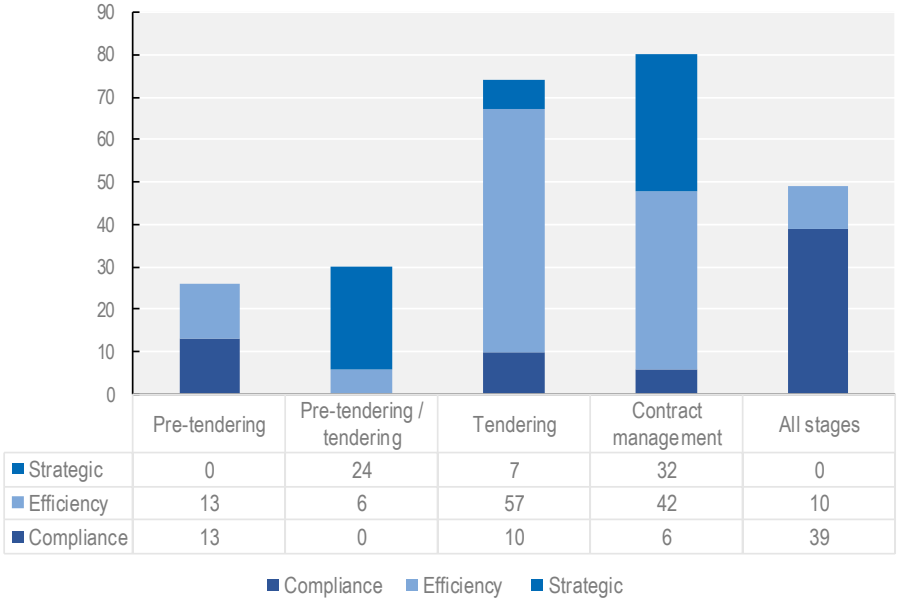
Note: Indicators relevant for National authorities and contracting authorities (NA/CA) have been added up to both NA and CA indicators.

3.3. Measuring the performance of public procurement throughout the procurement cycle

Looking at the distribution of indicators in the procurement cycle, it appears that the highest number of indicators are concentrated in the contract management phase (see Figure 11). This phase of the procurement cycle is often overlooked when it comes to generating added value from procurement processes, but actually it can play a significant role. Taken together, indicators related to pre-tendering and pre-tendering/tendering account for the highest number of indicators, underscoring the fact that the preparation of a procurement procedure is critical for its performance.

In the strategic category, indicators are equally balanced between the pre-tendering/tendering phase and the contract management phase. This is linked to the fact that indicators related for instance to green public procurement (GPP) and social criteria are attributed to both the pre-tendering and the tendering phase. In fact, using strategic criteria requires preparation in the pre-tendering phase, but are also part of the tendering process. The contract management phase is also relevant for this category as indictors will track the real implementation of policy objectives.

Figure 11. Distribution of indicators in the procurement cycle



	Pre-tendering	Pre-tendering / tendering	Tendering	Contract management	All stages
Strategic	0	24	7	32	0
Efficiency	13	6	57	42	10
Compliance	13	0	10	6	39

Note: Data refers to total indicators

3.4. Categorising core vs. aspirational public procurement indicators

Given the aspirational nature of the performance measurement framework, it distinguishes between 'core' and 'aspirational' indicators. Core indicators can be defined as minimum indicators that should be tracked as part of the performance measurement. In contrast, aspirational indicators can be considered optional, or to be implemented at a later stage when the performance measurement is more mature.

Each country can classify differently the "core vs aspirational" indicators depending on the national context and the maturity of the public procurement system. The classification of "core" indicators should be in any case independent from the mapping of available data.

It is recommended to opt for an incremental approach when implementing the framework. The idea is mainly to take into account countries' constraints to invest in developing a performance measurement framework. This means focusing on the implementation of core indicators as the first priority, prior to developing optional or more advanced indicators. Once the reporting is stabilised, countries will have a better view of how to further refine the analysis through additional indicators.

The framework already highlights a number of indicators as 'core', as identified in Table 3 below. The core indicators represent approximately a third of overall indicators. While the OECD framework suggests core indicators, the final choice regarding core / aspirational indicators should be left to the country or entity implementing the framework. Indeed, core indicators should reflect the specific needs and priorities of users.

Table 3. Share of core indicators

	Compliance	Efficiency	Strategic	Total
All indicators	68	128	63	259
Core indicators	13	45	25	83
Share of core indicators	19%	35%	40%	32%

Note: Data refers to total indicators

It is worth mentioning that is some cases, such as in EU countries, each member state is required to report on a number of KPIs every three years to the European Commission as part of a reporting exercise described in the European Public Procurement Directives (EU Parliament and Council, 2014[19]). Those indicators could be considered by countries as being "core indicators".

3.5. Defining the granularity of public procurement indicators

When introducing the performance measurement framework, countries may choose to define the level of granularity of indicators. Granularity may come from analysing indicator above / below certain thresholds (if applicable), or choosing specific procurement categories for the analysis (e.g. supplies, services, works). Some additional granularities may be very specific to the indicator. Depending on the context and the goals of the framework owner, different level of data break downs may be preferred. Box 2 explores a number of examples, where additional data granularity may be relevant.

In the EU context, certain thresholds apply for all European Member States (European Commission, n.d.[20]). Additionally, national-level thresholds may apply, too. Hence countries may decide to apply certain indicators above or below thresholds. Several indicators in the proposed framework already take into account the concept of thresholds: "Share of contracts above the threshold awarded to SMEs (in numbers)", "Share of contracts above the threshold awarded to SMEs (in procurement volume)", "Procurement volume of above the threshold contracts awarded to SMEs", and "Existence of a market place / catalogue for below the threshold procurement".

Certain indicators may be further broken down according to supplies / services / works. This detailed information may be relevant for policymaking purposes to understand if a particular sector is facing greater challenges compared to the others and hence may need a targeted policy intervention.

Box 2. Defining the granularity of indicators

The performance measurement framework defines a number of indicators (and sub-indicators) for the categories compliance, efficiency and strategic. Unless specified otherwise, indicators represent the aggregate within one year.

Depending on the context and the use case, countries may wish to gather data at more granular level than currently proposed in the framework. A few examples can demonstrate how additional data granularity may be relevant. It should be noted that these are examples for illustration, and other application of indicator breakdowns may apply.

Compliance

With respect to compliance, countries may wish to further define KPIs related to audit. Namely, currently some KPIs do not differentiate between internal vs. external audits (e.g. "Share of procurement audits compared to total number of audits", "Share of procurement procedures with irregularities detected at audit (internal / external)"). Depending on the country practices or the regulatory framework, a clearer distinction between internal or external audits could be implemented.

Efficiency

Similarly, some KPIs in the efficiency dimension also entails indicators that could be further broken down. For instance, the "Average time between the deadline for receiving offers and the date the contract is awarded" could be broken down into the following sub-indicators:

1. From the deadline for receiving offers to the preparation of the evaluation report

2. From the preparation of the evaluation report to the issuance of contract award
3. From the issuance of contract award to signing of contact

More details about this may be relevant in case this phase is particularly time-intensive and the contracting authority is seeking to shorten business processes.

Strategic

In the strategic dimension it is also possible to further refine some indicators. For example, authorities may want to track what kind of GPP and social criteria are applied in public procurement. Hence the indicators “Share of procurement procedures with GPP criteria” or “Share of procurement procedures with social criteria” could further be detailed based on the type of criteria applied, i.e. in the technical specification, as selection criteria or as award criteria.

3.6. Identifying data needed to measure the performance of public procurement

In line with the procurement measurement framework, there are different sources of information and data needed. Relevant data can indeed come from e-procurement systems, internal systems of contracting authorities and other governmental platforms (see Figure 12). In this context, the framework identifies different data points which represent the data required to build the indicators.

The framework identifies 247 data points: 75 for the compliance indicators, 126 for the efficiency indicators and 55 for the strategic indicators. There are key data points that are used in several indicators and/or across the different categories of indicators. These include: total number of procurement procedures, total procurement volume, total number of contracts, value of above threshold procedures, total contracted procurement volume. Many of the data points are related to the aspirational indicators. Each country will have to ensure the availability of the relevant data points. Section 4 of the paper provides more insights into the data.

The general rule set in the framework is that although relevant, the data required to build the indicators does not represent an indicator per se. For instance, the framework identifies the “share of contracts terminated” as an indicator. Although the “number of contracts terminated” which is needed to build the indicator could be an indicator per se, the framework does not include it. However, in some specific cases, the framework identifies data points as indicators per se. For instance, giving the need to advance the implementation of social procurement in many countries, the framework identifies “procurement volume with social criteria” as a standalone indicator. This data is also used to build other indicators such as the share of procurement volume with social criteria.

Figure 12. Example of potential data sources

Compliance	Efficiency	Strategic
• E-procurement system • Contracting authority's internal systems • Supreme Audit Institution's system • Other oversight bodies' systems • Competition Authority's system • First instance dispute resolution body's system • Cassation body's system • Contracting authority's internal system • CPB's internal system	• Contracting authority's internal systems • CPB's internal system • E-procurement system	• Contracting authority's internal systems • CPB's internal system • E-procurement system

4 Ensuring the availability and access of relevant quality data to assess the performance of procurement processes

The COVID 19 outbreak highlighted the need for interoperable IT infrastructures and digital services to avoid the disruption of public services and contributed to accelerate digitalisation of public procurement systems (European Commission, 2021[21]) (OECD, 2021[22]).

Measuring public procurement systems faces many challenges, including the scarcity of available, accessible, usable, quality data (OECD, 2019[2]). Indeed, lack of data increases the complexity and cost of generating particular indicators. As such, it often represents a bottleneck to the implementation of performance measurement frameworks. For a comprehensive performance measurement system, three pre-conditions regarding data need to be fulfilled: data availability, data access and data quality.

Despite ongoing efforts at digitalising public procurement systems, the basic building blocks for measuring performance, i.e. electronic data may not always be available or accessible. This entails data from the-e-procurement systems, internal systems of contracting authorities and other governmental platforms.

For instance, in some countries, paper-based procedures are still practiced, particularly below certain thresholds. Similarly, only some parts of the procurement process may be digitalised, but not the entire procurement cycle, at least at central level. For instance, 39% of surveyed OECD countries do not have ex post contract management functionalities in their e-procurement system (OECD, 2021[22]). As a result, only partial digital records may be available and data availability may be compromised.

In addition, the data generated from the different sources may not be fully electronic or interoperable with other platforms and government system, thereby limiting its usability. For example, in some e-procurement systems, available data consists of uploaded PDF scans of records, which are not easily machine-readable. As such, data usability and access is compromised for further analysis and processing. It is unlikely that this kind of data can be productively used in a performance measurement framework.

Poor data quality also represents a potential barrier to its exploitation for the performance management system. In some instances, IT systems do not have built-in protocols for data quality or verification mechanism. Hence, there is a risk of relying on faulty data for creating performance measurement indicators. For instance, the OECD work with the Mexican social security institute highlighted how when entering procurement data manually in the IT system mistakes impact data quality and thus informed decisions (OECD, 2018[14]). In this context, governments, or delegated public procurement authorities or procurement oversight bodies, could issue guidance on procurement data submission and storage (OECD, 2022[24]).

For the implementation of the performance measurement framework, it is necessary to map available data and gather a concrete understanding of the feasibility and quality of data collection or production at the indicator level. This entails mapping relevant data sources (i.e. identifying the data owner for each indicator), clarifying the format of data and assessing the data quality. The goal is to be able to determine which indicators can be produced with available data and to assess where additional interoperability links need to be created for easy access to relevant data points. At this stage, countries need to assess the costs involved in collecting or producing KPIs and determine a realistic action plan for introducing core indicators, taking into account a cost- benefit assessment. In specific cases, when data is not available in the short term, stakeholders can consider using surveys to collect relevant data and build indicators. For instance, in Norway, the public procurement authority implemented surveys to assess the uptake of strategic public procurement in contracting authorities (DFO, 2022[25]).

When assessing the feasibility of generating KPIs, countries could look for quick wins, i.e. identifying the indicators that can be produced without additional data collection efforts. It is also necessary to consider whether a legal reform is necessary to ensure that national authorities, in particular procurement authorities, have access to the data it needs for monitoring the performance of the procurement system. For instance, Germany has introduced the so-called Ordinance on Public Procurement Statistics (*Vergabestatistikverordnung*) as part of the transposition process of the 2014 Public Procurement Directives, which mandates centralised data collection of public procurement statistics above and below EU thresholds. Prior to this, the federal government had no legal basis to collect procurement statistics from the German *Länder*, which resulted in a very patchy picture of overall procurement data (OECD, 2019[26]). Similarly, Greek authorities provided the main procurement body, the Hellenic Single Public Procurement Authority (HSPPA), with a detailed mandate to monitor the procurement system through a Joint Ministerial Decision (JMD No. 70362). The Joint Ministerial Decision specifies a number of indicators as well as the authorities that have to report certain procurement data once a year to HSPPA (MAPS, forthcoming[27]). As a simple tool to identify data feasibility, countries may apply a checklist (see Box 3).On the other hand, oversight bodies and competition authorities should also have access to procurement data in determined conditions and situations that could vary depending on the jurisdictions (OECD, 2022[24])

Box 3. Checklist for data feasibility

Key questions to assess the feasibility of production of KPI:

1. Who is the owner of the data?
2. What format does the data have? Is the format usable for the purposes of the performance measurement framework? Does it fit the purpose of the required analysis?
3. Is the quality of data sufficiently good to be used for KPIs (i.e. accuracy, completeness, consistency, timeliness)?
4. Can the indicator be produced without additional actions?
5. If not, what actions are needed to produce this indicator? (Legal, technical, IT-related, etc.)

The below sections will focus on improvement to data from on the one hand e-procurement systems and governmental systems, and on the other hand from internal IT systems of contracting authorities.

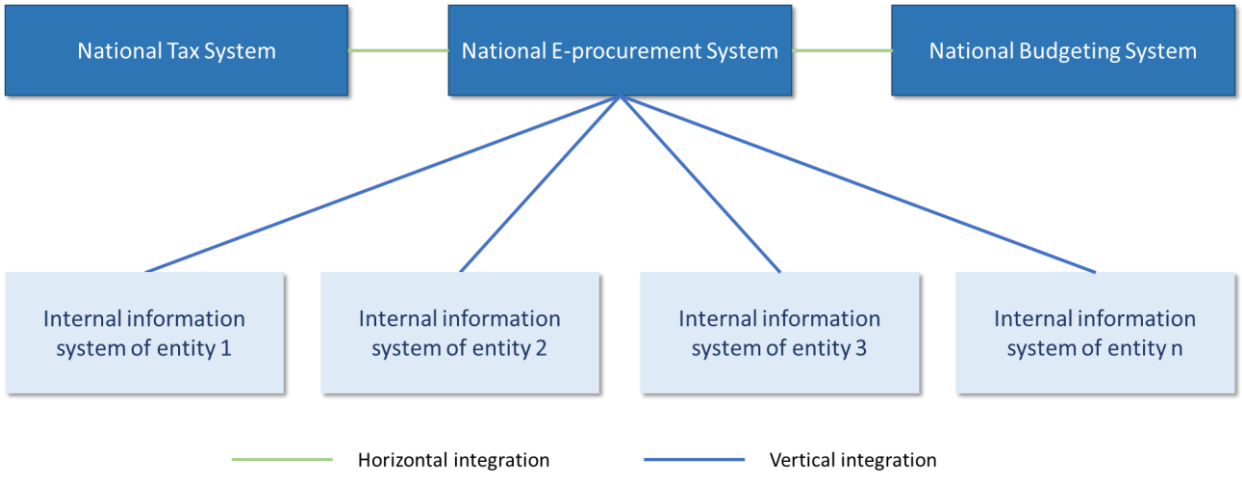
4.1. Improving data availability, quality and access from the e-procurement system and governmental systems

The use of e-procurement systems is a prerequisite for effective measurement. Indeed, data availability is improved by widespread and coherent use of these systems across levels of government, for all procedures and throughout the procurement cycle (OECD, 2019[2]).

In the last two decades, countries have been expanding functionalities of e-procurement systems to achieve better outcomes and deliver services more effectively and efficiently (OECD, 2021[28]). Following these technological advances, vertical and horizontal integration of e-procurement systems with other governmental platforms are the next steps to achieve a fully integrated procurement system to provide government with full visibility on the use of public funds across different government departments (OECD, 2018[28]) and to achieve various efficiency gains for both the public and the private sector (OECD, 2018[28]).

In this context, there are two categories of integrations to consider: horizontal integration and vertical integration (see Figure 13). Vertical integration refers to the integration of the national e-procurement system with the internal digital procurement and management tools of contracting authorities that is discussed in the section below. Horizontal integration involves integrating the e-procurement system with other governmental systems such as the national tax system, the national budgeting/accounting system, or the national social security system (OECD, 2018[28]). Indeed, beyond data generated by the e-procurement system, a comprehensive performance measurement system requires data from other procurement stakeholders, particularly for compliance related aspects. If government systems are not interoperable and data cannot be easily transferred between systems, the production of indicators relying on external data sources is likely to be challenging. For horizontal integration to be most effective and accepted, ensuring the appropriate safeguards regarding privacy and data protection is particularly important (OECD, n.d.[30]).

Figure 13. Example of horizontal and vertical integration of the e-procurement system



Source: Adapted from (OECD, 2018[28]).

4.2. Improving data availability, quality and access from internal information systems of contracting authorities and policymakers

In addition to e-procurement platforms, the digitalisation of the procurement process relies also on the digitalisation of internal systems supporting whole-of-procurement activities, including tender preparation and contract management until the completion of the contract.

A strong IT system enables also improved data collection (OECD, 2018[14]). Internal records, in particular for assessing the performance of contracting authorities or CPBs provides key data source for the production of KPIs. The availability of internal records in digital format simplifies the data collection process, allowing for automatic processing. Hence, improving contracting authorities' internal management system is key to strengthening performance measurement systems.

The OECD experience shows that contracting authorities are often undertaking procurement activities using their internal information system. When using excel documents or scanned documents, when entering key data manually, the quality and usability of data is impacted. This calls for reinforcing data quality from information systems of contracting authorities.

Finally, a key data source is the information system of national authorities. Indeed, those systems include relevant public procurement data in particular in the compliance category.

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Annex A. List of indicators

Compliance indicators

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
Publication/ transparency	CA / NA	Share of procedures published on national e-procurement system		Pre-tendering	Core	Assessment of the share of procedures published in the National e-procurement system	Tender	= Number of procedures published on National e-procurement system / Total number of procurement procedures	Indicator 7(a) ; 1 (c)
	CA / NA	Share of procedures published with obligation to publish		Pre-tendering	Core	Assessment of the share of procedures published on the e-procurement system, where there is an obligation to publish	Tender	= Number of procedures published on e-procurement system with obligation to publish / Total number of procedures with obligation to publish	Indicator 7(a); 1 (c)
	CA / NA	Share of procedures published without obligation to publish		Pre-tendering	Core	Assessment of the share of procedures published on the e-procurement system, where there is no obligation to do so. This indicator provides information about the transparency of the procurement system beyond legal requirements.	Tender	= Number of procedures published on e-procurement system without obligation to publish / Total number of procedures without obligation to publish	Indicator 7(a); 1 (c)

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
	CA / NA	Obligation to publish information after the tender stage		Pre-tendering	Core	Assessment of whether an obligation to publish information after the tender stage is present	Tender	Yes/No	
	CA / NA	Share of contracts compliant with publication obligations during the contract management phase		Contract management	Core	Assessment of the share of contracts published with obligations to publish during the contract management phase	Tender	= Number of contracts compliant with the obligation to publish information during the contract management phase / total number of contracts with obligation to publish during the contract management phase	
	CA / NA	Share of contracts with information published during the contract management phase without obligation		Contract management	Aspirational	Assessment of the contracts published with no obligations to publish during the contract management phase	Tender	= Number of contracts published with no obligation to publish information during the contract management phase / total number of contracts with no obligation to publish during the contract management phase	
	NA	Existence of procurement data in open data format		Pre-tendering	Aspirational	Assessment of open data availability	CA specific / national	Yes / No	Indicator 7(a)
	CA / NA	Share of procedures conducted based on exemptions from competitive tendering (in number)		Pre-tendering	Aspirational	Assessment of the share of procedures in number conducted based on exemption from competitive tendering	Tender	= Number of procedures conducted based on exemptions from competitive tendering / total number of procedures	
	CA / NA	Share of procedures conducted based on exemptions from competitive tendering (in volume)		Pre-tendering	Aspirational	Assessment of the share of procedures in volume conducted based on exemption from competitive tendering	Tender	= Volume of procedures conducted based on exemptions from competitive tendering / total volume of procedures	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
Ex ante controls	CA / NA	Share of procedures submitted to ex-ante controls		Pre-tendering	Core	Assessment of the share of procedures submitted to ex-ante controls	Tender	= Number of procedures submitted to ex-ante controls / Total number of procedures	
	CA / NA	Average duration of ex ante controls (by body/ institution in charge of those controls)		Pre-tendering	Aspirational	Assessment of the average duration of ex ante controls	Tender	= ∑ of days taken for ex ante control / Number of procedures submitted to ex ante controls	
	CA / NA	Share of procedures with irregularities at ex-ante controls		Pre-tendering	Aspirational	Assessment of the share of procedures, in which irregularities are detected at ex ante controls	Tender	= Number of procedures with irregularities at ex ante controls / Total number of procedures	
	CA / NA	Share of irregularities related to selection criteria		Pre-tendering	Aspirational	Assessment of the share of procedures, in which detracted irregularities at ex ante controls pertain to selection criteria	Tender	= Number of procedures with irregularities at ex ante controls related to selection criteria / Total number of procedures with irregularities	
	CA / NA	Share of irregularities related to technical specifications		Pre-tendering	Aspirational	Assessment of the share of procedures, in which detracted irregularities at ex ante controls pertain to technical specifications	Tender	= Number of procedures with irregularities at ex ante controls related to technical specifications / Total number of procedures with irregularities	
	CA / NA	Share of irregularities related to award criteria		Pre-tendering	Aspirational	Assessment of the share of procedures, in which detracted irregularities at ex ante controls pertain to award criteria	Tender	= Number of procedures with irregularities at ex ante controls related to award criteria / Total number of procedures with irregularities	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
Sanctions	CA / NA	Number of financial sanctions applied to the contracting authority	Corrections	All stages	Aspirational	Assessment of the number of financial corrections applied to the contracting authority	Tender	= ∑ of the number of financial corrections applied to the contracting authority	Indicator 14 (c)
			Fines	All stages	Aspirational	Assessment of the number of fines applied to the contracting authority	Tender	= ∑ of the number of fines applied to the contracting authority	Indicator 14 (c)
			Other (depending on regulations)	All stages	Aspirational	Assessment of the number of other financial sanctions applied to the contracting authority, as per regulatory framework	Tender	= ∑ of the number of other financial sanctions applied to the contracting authority	Indicator 14 (c)
	CA / NA	Value of financial sanctions applied to the contracting authority	Corrections	All stages	Aspirational	Assessment of the value of financial corrections applied to the contracting authority	Tender	= ∑ of the value of financial corrections applied to the contracting authority	Indicator 14 (c)
			Fines	All stages	Aspirational	Assessment of the value of fines applied to the contracting authority	Tender	= ∑ of the value of fines applied to the contracting authority	Indicator 14 (c)
			Other (depending on regulations)	All stages	Aspirational	Assessment of the value of other financial sanctions applied to the contracting authority, as per regulatory framework	Tender	= ∑ of the value of other financial sanctions applied to the contracting authority	Indicator 14 (c)
	CA / NA	Number of other (non-financial) sanctions applied	Number of procedures terminated by competent bodies due to breaches to the regulatory framework	All stages	Aspirational	Assessment of the number of procedures terminated by competent bodies due to breaches to the regulatory framework	Tender	= ∑ of the number of procedures terminated by competent bodies due to breaches to the regulatory framework	Indicator 14 (c)

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
			Number of procurement officials sanctioned by competent bodies due to breaches to the regulatory framework	All stages	Aspirational	Assessment of the number of procurement officials sanctioned by competent bodies due to breaches to the regulatory framework. Sanctions to the individual can be administrative and criminal.	Tender	= ∑ of the number of procurement officials sanctioned by competent bodies due to breaches to the regulatory framework	Indicator 14 (c)
			Number of criminal proceedings initiated due to breaches to the regulatory framework	All stages	Aspirational	Assessment of the number of criminal proceedings initiated due to breaches to the regulatory framework	Tender	= ∑ of the number criminal proceedings initiated due to breaches to the regulatory framework	Indicator 14 (c)
			Head of contracting authority sanctioned	All stages	Aspirational	Assessment of whether (and how often) the head of the contracting authority was sanctioned due to breaches to the regulatory framework	Tender	= ∑ of the number of sanctions to the head of the contracting authority	Indicator 14 (c)
	CA / NA	Number of sanctions applied for bid-rigging		Tendering	Aspirational	Assessment of the number of sanctions applied for bid-rigging		= ∑ of the number of sanctions applied for bid-rigging	
Integrity	CA / NA	Existence of an integrity strategy at contracting authority level		All stages	Aspirational	Assessment of whether an integrity strategy at contracting authority level has been adopted	CA specific	Yes / No	Indicator 14
	NA	Existence of a system for declaring a potential conflict of interest for contracting authorities		All stages	Aspirational	Assessment of whether a system for declaring potential conflict of interest for contracting authorities is in place	CA specific / national	Yes / No	Indicator 14 (a); 14(g)

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
	NA	Existence of a system for declaring a potential conflict of interest for suppliers		All stages	Aspirational	Assessment of whether a system for declaring potential conflict of interest for suppliers is in place	CA specific / national	Yes / No	Indicator 14 (a); 14(g)
	NA	Submission rate of interest declarations by procurement officials		All stages	Aspirational	Assessment of share of submission of interest declarations by procurement officials	CA specific	= Number of submitted interest declarations / Total number of procurement officials required to submit a declaration	Indicator 14 (a); 14(g)
	NA	Number of conflicts of interest identified by competent bodies		All stages	Aspirational	Assessment of the number of conflicts of interest identified	Tender	= ∑ of number of conflicts of interest identified by competent bodies	Indicator 14 (a); 14(g)
	CA / NA	Existence of an audit of the public procurement system		All stages	Aspirational	Assessment of the existence of an audit of the public procurement system		Yes/ No	
	CA / NA	Existence of internal control system within a contracting authority		All stages	Aspirational	Assessment of whether an internal control system is operational within a contracting authority	CA specific	Yes / No	Indicator 12
	CA / NA	Existence of an independent internal audit function covering public procurement		All stages	Aspirational	Assessment of whether an internal audit function is operational within a contracting authority	CA specific	Yes / No	Indicator 12
	NA	Existence of whistle-blowing mechanisms for reporting integrity breaches		All stages	Aspirational	Assessment of whether a whistle-blowing mechanism is operational for reporting integrity breaches	CA specific / national	Yes / No	Indicator 14(f)
Audit	NA	Existence of an audit of the public procurement system		All stages	Aspirational	Assessment of whether an audit of the procurement system has been carried out	National	Yes / No	Indicator 12

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
	NA	Share of procurement audits compared to total number of audits		All stages	Aspirational	Assessment of the share of procurement audits out of the total number of audits	National	= Number of procurement audits / Total number of audits	Indicator 12 (b)
	NA	Share of procurement procedures with irregularities detected at audit (internal / external)		All stages	Aspirational	Assessment of the share of procurement procedures with irregularities detected at audit	Tender	= Number of procedures with irregularities at audit / Total number of audited procedures	
	NA	Share of public procurement irregularities		All stages	Core	Assessment of the share of procurement irregularities at the national level	Tender	= Number of procedures with irregularities / Total number of procurement procedures	
	NA	Share of public procurement irregularities by type of contracting authorities	Central government level	All stages	Aspirational	Assessment of the share of procurement irregularities at central government level	Tender	= Number of procedures with irregularities at central government level / Total number of procedures with irregularities	
			Municipality level	All stages	Aspirational	Assessment of the share of procurement irregularities at municipality level	Tender	= Number of procedures with irregularities at municipality level / Total number of procedures with irregularities	
			Utilities	All stages	Aspirational	Assessment of the share of procurement irregularities at utilities level	Tender	= Number of procedures with irregularities at utilities level / Total number of procedures with irregularities	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
			Other	All stages	Aspirational	Assessment of the share of procurement irregularities at the level of other contracting authorities	Tender	= Number of procedures with irregularities by other contracting authorities / Total number of procedures with irregularities	
	CA / NA	Share of public procurement irregularities by purchasing category	Services	All stages	Aspirational	Assessment of the share of procurement irregularities by services	Tender	= Number of services procedures with irregularities / Total number of procedures with irregularities	
			Supplies	All stages	Aspirational	Assessment of the share of procurement irregularities by supplies	Tender	= Number of supplies procedures with irregularities / Total number of procedures with irregularities	
			Works	All stages	Aspirational	Assessment of the share of procurement irregularities by works	Tender	= Number of works procedures with irregularities / Total number of procedures with irregularities	
	CA / NA	Share of public procurement irregularities by type of procedure (according to national framework)		All stages	Aspirational	Assessment of the share of procurement irregularities by type of procedure (according to national framework)	Tender	= Number of open procedures with irregularities / Total number of procedures with irregularities = Number of restricted procedures with irregularities / Total number of procedures with irregularities	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
	CA / NA	Share of irregularities according to the stage of procurement	Tender phase	All stages	Aspirational	Assessment of the share of procurement irregularities in the tender phase	Tender	= Number of procedures with irregularities in the tender phase / Total number of procedures with irregularities	
			Contract signature	All stages	Aspirational	Assessment of the share of procurement irregularities in the contract signature phase	Tender	= Number of procedures with irregularities in the contract signature phase / Total number of procedures with irregularities	
			Contract implementation	All stages	Aspirational	Assessment of the share of procurement irregularities in the contract implementation phase	Tender	= Number of procedures with irregularities in the contract implementation phase / total number of contracts with irregularities	
	CA / NA	Share of public procurement irregularities by type of infringement	Related to selection criteria	All stages	Aspirational	Assessment of the share of procurement irregularities related to selection criteria	Tender	= Number of procedures with irregularities related to selection criteria / Total number of procedures with irregularities	
			Related to technical specifications	All stages	Aspirational	Assessment of the share of procurement irregularities related to technical specifications	Tender	= Number of procedures with irregularities related to technical specifications / Total number of procedures with irregularities	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
			Related to award criteria	All stages	Aspirational	Assessment of the share of procurement irregularities related to award criteria	Tender	= Number of procedures with irregularities related to award criteria / Total number of procedures with irregularities	
	CA / NA	Share of audit recommendations from internal audit implemented		All stages	Aspirational	Assessment of the share of implemented audit recommendations from internal audit	CA specific	= Number of implemented audit recommendations from internal audit / Total number of audit recommendations from internal audit	Indicator 12(c)
	CA / NA	Share of audit recommendations from external audit implemented		All stages	Aspirational	Assessment of the share of implemented audit recommendations from external audit	CA specific	= Number of implemented audit recommendations from external audit / Total number of audit recommendations from external audit	Indicator 12(c)
	CA / NA	Share of challenged public procurement procedures		Tendering	Core	Assessment of the share of public procurement challenges		= Number of challenged procurement procedures / Total number of procurement procedures	Indicator 13
Remedies	CA / NA	Share of challenged public procurement procedures	First stage	Tendering	Aspirational	Assessment of the share of public procurement challenged in the first stage	Tender	= Number of challenged procurement procedures in the first stage / Total number of procurement procedures	Indicator 13 (a)

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
			Appeals	Tendering	Aspirational	Assessment of the share of public procurement challenged in the appeals stage	Tender	= Number of challenged procurement procedures in the appeals stage / Total number of challenged procurement procedures	Indicator 13
	CA / NA	Average number of challenges to a procurement procedure		Tendering	Core	Assessment of the average number of challenges to a single procurement procedure (i.e. whether one procedure has been challenged multiple times)	Tender	= Number of challenges to a single procurement procedure / Total number of procedures challenged	Indicator 13
	CA / NA	Share of procedures with application of interim measures		Tendering	Core	Assessment of the share of procedures with application of interim measures	Tender	= Number of procedures with application of interim measures / Total number of procedures challenged	Indicator 13
	CA / NA	Share of successful decisions (in favour of CA)	First stage	Tendering	Aspirational	Assessment of the share of successful decisions (in favor of the contracting authority) in the first stage of dispute resolution	Tender	= ∑ of decisions in favor of the CA in the first stage / Number of procedures challenged	Indicator 13
			Appeals	Tendering	Aspirational	Assessment of the share of successful decisions (in favor of the contracting authority) in the appeals stage of dispute resolution	Tender	= ∑ of decisions in favor of the CA in the appeals stage / Number of procedures challenged	Indicator 13

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational indicator	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
	CA / NA	Average time for decisions	First stage	Tendering	Aspirational	Assessment of the average time for a decision in the first stage	Tender	= ∑ number of days for a decision at the first stage / Total number of procedures challenged at the first stage	Indicator 13
			Appeals	Tendering	Aspirational	Assessment of the average time for a decision in the appeals stage	Tender	= ∑ number of days for a decision at the appeals stage / Total number of procedures challenged at the appeals stage	Indicator 13
	CA	Share of contracts with complaints		Contract management	Core	Assessment of the share of contracts with complaints	Tender	= Number of contracts with complaints / Total number of contracts	
	CA / NA	Share of contracts with litigation		Contract management	Core	Assessment of the share of contracts with litigation (including ADR)	Tender	= Number of contracts with litigation / Total number of contracts	
	CA / NA	Average duration of litigation		Contract management	Aspirational	Assessment of the average duration of litigation	Tender	= ∑ number of days for a decision in litigation / Total number of procedures in litigation	
Payments	CA / NA	Share of invoices paid on time		Contract management	Core	Assessment of the share of invoices paid on time to suppliers	Tender	= Number of invoices paid on time/ Total number of paid invoices	Indicator 4(b)

Note: Level of data: tender level / contract, CA specific, national

Efficiency indicators

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
Planning	NA / CA	Preparation/publication of annual procurement plans		Pre-tendering	Core	Assessment of the existence/publication of procurement plans	CA specific	Yes/ No	
	NA / CA	Number of procedures with Prior-information Notices published		Pre-tendering	Aspirational	Assessment of the number of procedures with Prior-information Notices published	Tender	= Number of PIN	
	NA / CA	Share of procedures with a Prior-information Notice		Pre-tendering	Aspirational	Assessment of the share of procedures with Prior-information Notices published	Tender	= Number of PIN/ Competitive procedures	
	NA / CA	Existence of Risk Management approach applied to procurement procedures		Pre-tendering	Core	Assessment of the existence of Risk Management approach applied to procurement procedures	National / CA-specific	Yes/ No	
	NA / CA	Number of procedures with a formal Risk Management approach		Pre-tendering	Aspirational	Assessment of the number of procurement procedures with a formal Risk Management approach	Tender	= Number of procedures with a formal RM approach	
	NA / CA	Share of procedures with a formal Risk Management approach		Pre-tendering	Aspirational	Assessment of the share of procurement procedures with a formal Risk Management approach	Tender	= Number of procedures with a formal RM approach/ Procurement procedures	
	NA / CA	Total estimated procurement volume based on planning (for a specific year)		Pre-tendering	Core	Assessment of the total estimated procurement volume based on planning	Tender	= ∑ estimated procurement volume	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	NA	Existence of a mandatory formal market consultation approach applied to procurement procedures		Pre-tendering	Core	Assessment of the existence of a mandatory formal market consultation for all procurement procedures	National / CA-specific	Yes/ No	Indicator 9(a)
	NA / CA	Share of procedures with a formal market analysis approach		Pre-tendering	Aspirational	Assessment of the share of procurement procedures with a formal market consultation	Tender	= Number of procedures that apply a formal market analysis approach / Total number of procedures	Indicator 9(a)
General data	NA / CA	Average preparation time for the procurement procedure		Pre-tendering/ Tendering	Aspirational	Assessment of the preparation time for the procurement procedure (from needs analysis, market analysis to drafting of tender documents and publication)	Tender	= ∑ number of days for preparing a procurement procedure / Number of procurement procedures	
	NA / CA	Average cost for the preparation of the procurement procedure		Pre-tendering/ Tendering	Aspirational	Assessment of the costs for the preparation time of the procurement procedure (from needs analysis, market analysis to drafting of tender documents and publication)	Tender	= ∑ costs related to the preparation of a procurement procedure / Total Number of procurement procedures	
	NA / CA	Average cost of preparing the tender documents (from approval to publication)		Pre-tendering/ Tendering	Core	Assessment of average costs to prepare the tender documents	Tender	= ∑ costs related to the preparation of tender documents/ Total Number of procurement procedures	
	NA / CA	Average cost of preparing tender documents / procurement method		Pre-tendering/ Tendering	Aspirational	Assessment of average costs to prepare the tender documents	Tender	= ∑ costs related with the preparation of tender documents for each procurement method/ Number of procurement procedures	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	NA / CA	Average time of preparing tender documents (from approval to publication)		Pre-tendering/ Tendering	Core	Assessment of average time to prepare tender documents	Tender	= ∑ number of days for preparing procurement documentation/ Number of procurement procedures	
	NA / CA	Average time of preparing tender documents / procurement method		Pre-tendering/ Tendering	Aspirational	Assessment of average time to prepare tender documents for each procurement method	Tender	= ∑ number of days for preparing procurement documentation per procurement method/ Number of procurement procedures for the procurement method	
	NA / CA	Number of procurement procedures		Pre-tendering	Core	Assessment of the number of procurement procedures	Tender	= ∑ procurement procedures	
	NA / CA	Number of procurement procedures by procurement method (depending on the ones available in the national framework)		Tendering	Core	Assessment of the number of procedures under each procurement method launched by the CA	Tender	= Number of open tenders = Number of restricted tenders = Number of direct awards etc.	
	NA / CA	Share of procurement methods in numbers (depending on the ones available in the national framework)		Tendering	Core	Assessment of the number of procurement methods	Tender	= Number of procurement procedures per procurement method / Total number of procurement procedures	
	NA / CA	Share of procurement methods in volume (depending on the ones available in the national framework)		Tendering	Core	Assessment of the share of procedures under each procurement method launched by the CA	Tender	= Number of open tenders/ Total number of procedures = Number of restricted tenders / Total number of procedures = Number of direct awards / Total number of procedures etc.	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	NA / CA	Share of competitive procedures (in numbers)		Tendering	Aspirational	Assessment of the number of competitive procedures	Tender	= Number of competitive procedures / Total number of procurement procedures	
	NA / CA	Share of competitive procedures (in volume)		Tendering	Aspirational	Assessment of the volume of competitive procedures	Tender	= Volume of competitive procedures / Total volume of procurement	
	NA / CA	Number of above the threshold procedures		Tendering	Aspirational	Assessment of the number of above the threshold procedures	Tender	= Number of above threshold procedures	
	NA / CA	Number of below the threshold procedures		Tendering	Aspirational	Assessment of the number of below the threshold procedures	Tender	= Number of below threshold procedures	
	NA / CA	Value of above the threshold procedures		Tendering	Aspirational	Assessment of the value of above the threshold procedures	Tender	= ∑ value of above threshold procedures	
	NA / CA	Value of below the threshold procedures		Tendering	Aspirational	Assessment of the value of below the threshold procedures	Tender	= ∑ value of below threshold procedures	
	NA / CA	Share of above the threshold procedures (in numbers)		Tendering	Core	Assessment of the share of above the threshold procedures	Tender	= Number of above threshold procedures/ Total number of procedures	
	NA / CA	Share of below the threshold procedures (in numbers)		Tendering	Core	Assessment of the share of below the threshold procedures	Tender	= Number of below threshold procedures/ Total number of procedures	
	NA / CA	Share of above the threshold procedures (in value)		Tendering	Core	Assessment of the share of above the threshold procedures	Tender	=∑ value of above threshold procedures / Number of procedures	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	NA / CA	Share of below the threshold procedures (in value)		Tendering	Core	Assessment of the share of below the threshold procedures	Tender	=∑ value of below threshold procedures / Number of procedures	
	NA / CA	Number of procurement procedures using multiple award criteria		Tendering	Core	Assessment of the number of procurement procedures using multiple award criteria	Tender	= Number of procurement procedures using multiple award criteria	
	NA / CA	Share of procurement procedures using multiple award criteria		Tendering	Core	Assessment of the share of procurement procedures using multiple award criteria	Tender	= Number of procurement procedures using multiple award criteria/ Total number of procedures	
	NA / CA	Number of procurement procedures divided into lots		Tendering	Aspirational	Assessment of the number of procurement procedures divided into lots	Tender	= Number of procurement procedures divided into lots	
	NA / CA	Share of procurement procedures divided into lots		Tendering	Core	Assessment of the share of procurement procedures divided into lots	Tender	= Number of procurement procedures divided into lots/ Total number of procedures	
	NA / CA	Share of procurement volume divided into lots		Tendering	Aspirational	Assessment of the share of procurement procedures volume divided into lots	Tender	= Total volume procurement procedures divided into lots / Total volume of procedures	
	NA / CA	Share of procedures using electronic means (in number)		Tendering	Core	Assessment of the share of procurement procedures using electronic means	Tender	= Number of procedures using electronic means/ Total number of procedures	
	NA / CA	Share of procedures using electronic means (in volume)		Tendering	Core	Assessment of the share of procurement procedures using electronic means	Tender	= Volume of procedures using electronic means / Total volume of procedures	
Efficiency tools	CA	Average cost of preparing a FA		Tendering	Aspirational	Assessment of the Average cost of preparing a FA	Tender	= ∑ costs of preparing a FA/ Number of FA	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	CA	Average cost of preparing a second stage competition of FA (from approval to publication)		Tendering	Aspirational	Assessment of the Average cost of preparing a second stage competition of a FA	Tender	= ∑ costs of preparing a second stage competition of an FA/ Number of second stage competition FAs	
	CA	Average cost of preparing a DPS		Tendering	Aspirational	Assessment of the Average cost of preparing a FA	Tender	= ∑ costs of preparing a DPS/ Number of DPSs	
	CA	Average cost of preparing a competition within a DPS		Tendering	Aspirational	Assessment of the Average cost of preparing a DPS	Tender	= ∑ costs of preparing a competition within a DPS/ Number of competitions in DPSs	
	CA	Average cost for preparing an e-auction		Tendering	Aspirational	Assessment of the Average cost of preparing an e-auction	Tender	= ∑ costs of preparing an e-auction/ Number of e-auctions	
	CA	Average time of preparing a FA (from approval to publication)		Tendering	Aspirational	Assessment of the average time of preparing a FA	Tender	= ∑ time of preparing an FA/ Number of FAs	
	CA	Average time of preparing a second stage competition of FA (from approval to publication)		Tendering	Aspirational	Assessment of the average time of preparing a second stage competition of FA	Tender	= ∑ time of preparing a second stage competition of an FA/ Number of second stage competition of an FA	
	CA	Average time of preparing a DPS (from approval to publication)		Tendering	Aspirational	Assessment of the average time of preparing a DPS	Tender	= ∑time of preparing a DPS/ Number of DPSs	
	CA	Average time of preparing a competition within a DPS (from approval to publication)		Tendering	Aspirational	Assessment of the average time of preparing a competition within a DPS	Tender	=∑ time of preparing a competition within a DPS/ Number of DPSs	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	CA	Average time of preparing an e-auction		Tendering	Aspirational	Assessment of the average time of preparing an e-auction	Tender	= ∑ time of preparing an e-auction ask / Number of e-auctions	
	NA / CA	Estimated value of efficiency tools		Tendering	Aspirational	Assessment of the estimated value of Framework agreements efficiency tools within the CA	Tender	= ∑ estimated value of efficiency tools / Number of efficiency tools	
General data	NA / CA	Average Number of bidders		Tendering	Core	Assessment of the level of participation in competitive procedures (competition indicator)	Tender	= ∑ bidders / Number of competitive? procedures	
	NA / CA	Share of competitive procedures with a single bid (in number)		Tendering	Core	Assessment of the level of participation in competitive procedures (competition indicator)	Tender	= Procedures with single bids / Number of competitive procedures	
	NA / CA	Share of competitive procedures with a single bid (in volume)		Tendering	Core	Assessment of the level of participation in competitive procedures	Tender	= Volume of procedures with single bids / Volume of competitive procedures	
	NA / CA	Share of qualified bidders		Tendering	Core	Assessment of the share of qualified bidder (competition indicator)	Tender	= Number of successful bidders / Total number of bidders	
	NA / CA	Total Savings (if a methodology exists)		Tendering	Aspirational	Assessment of budgetary savings performed by the CA	Tender	= ∑ savings for each procurement procedure	
	NA / CA	Average submission deadline for competitive procedures (above thresholds)		Tendering	Core	Assessment of the average submission deadline for competitive procedures	Tender	= ∑ number of days between the publication of the competitive procedure and the deadline for receiving offers / Number of competitive procedures	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	NA / CA	Average submission deadline for competitive procedures (below thresholds)		Tendering	Core	Assessment of the average submission deadline for competitive procedures	Tender	= ∑ number of days between the publication of the competitive procedure and the deadline for receiving offers / Number of competitive procedures	
	NA / CA	Average time between the deadline for receiving offers and the date the contract is awarded		Tendering	Core	Assessment of the average speed of entities to award the contract	Tender	= ∑ number of days between the deadline for receiving offers and the date the award of the contract / Number of competitive procedures	
	CA	Average difference between the estimated value of the procedure and cost proposed by the awarded supplier (in %)		Tendering	Aspirational	Assessment of the financial estimation of the contract	Tender	= ∑ difference between cost estimate and cost proposed by the awarded supplier (in %)/ Number of procedures	
	NA / CA	Share of procurement procedures cancelled		Tendering	Core	Assessment of the share of tenders cancelled	Tender	= Number of procurement procedures cancelled / Total number of procurement procedures	
Efficiency tools	CA	Number of second stage competition per FA		Tendering	Aspirational	Assessment of the number of second stage competition per FA	Tender	= ∑ of the number of second stage competition per FA	
	CA	Volume of second stage competition per FA		Tendering	Aspirational	Assessment of the volume of second stage competition per FA	Tender	= ∑ of the volume of second stage competition per FA	
	CA	Average Number of bidders in FAs		Tendering	Aspirational	Assessment of the level of participation in FAs	Tender	= ∑ bidders in FA / Number of FAs	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	CA	Average Number of bidders in FAs mini-competition (when applicable)		Tendering	Aspirational	Assessment of the level of participation in FA mini competition	Tender	= ∑ number of bidders in each FA mini competition/ Total number of FA mini competitions	
	CA	Share of bidders participating in FAs second stage competition		Tendering	Aspirational	Assessment of the level of participation in FA second stage competition compared to the FA	Tender	= ∑ (number of bidders in each FA mini competitions / Number of economic operators part of the FA) / Total number of FA mini competitions	
	CA	Average Number of bidders in DPS		Tendering	Aspirational	Assessment of the level of participation in DPSs	Tender	= ∑ bidders in DPS / Number of DPSs	
	CA	Average Number of bidders in DPS' mini competitions		Tendering	Aspirational	Assessment of the level of participation in DPS mini competition	Tender	= ∑ number of bidders in each DPS mini competition/ Total number of DPS competitions	
	CA	Share of bidders participating in DPS' mini- competition		Tendering	Aspirational	Assessment of the level of participation in DPS mini competition compared to the DPS	Tender	= ∑ (number of bidders in each DPS mini competitions / Number of economic operators part of the DPS)/ Total number of DPS mini competition	
	CA	Average Number of bidders in e-auctions		Tendering	Aspirational	Assessment of the level of participation in e-auctions	Tender	= ∑ bidders in e-auctions / Number of e-auctions	
	CA	Number of successful bidders in FAs		Tendering	Aspirational	Assessment of the participation of successful bidders in FAs	Tender	= Number of successful bidders in FAs / Total number of FAs	
	CA	Number of successful bidders in DPS		Tendering	Aspirational	Assessment of the participation of successful bidders in DPSs	Tender	= Number of successful bidders in DPSs / Total number of DPSs	
	CA	Number of successful bidders in e-auctions		Tendering	Aspirational	Assessment of the participation of successful bidders in e-auctions	Tender	= Number of successful bidders in e-auctions / Total number of e-auctions	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	CA	Share of successful bidders in FA		Tendering	Aspirational	Assessment of the share of successful bidders in FA (competition indicator)	Tender	= ∑ (Number of successful bidders in FAs / Total number of bidders in FAs)/ Total Number of FAs	
	CA	Share of successful bidders in DPS		Tendering	Aspirational	Assessment of the share of successful bidders in DPS (competition indicator)	Tender	= ∑ (Number of successful bidders in DPSs / Total number of bidders in DPSs)/ Total Number of DPSs	
	CA	Share of successful bidders in e-auctions		Tendering	Aspirational	Assessment of the share of successful bidders in e-auctions (competition indicator)	Tender	= ∑ (Number of successful bidders in e-auctions/ Total number of bidders in e-auctions)/ Total Number of e-auctions	
	NA / CA	Savings when using efficiency tools		Tendering	Aspirational	Assessment of budgetary savings performed by the CA when using efficiency tools	Tender	= ∑ savings when using efficiency tools	
General	NA / CA	Number of contracts using multiple award criteria		Contract Management	Aspirational	Assessment of the number of contracts using multiple award criteria. Multiple award criteria include qualitative, environmental and/or social aspects, linked to the subject-matter of the contract, and by which the successful tender is to be selected	Contract	= Number of contracts using multiple award criteria	
	NA / CA	Share of contracts using multiple award criteria		Contract Management	Core	Assessment of the share of contracts using multiple award criteria	Contract	= Number of contracts using multiple award criteria/ Total number of contracts	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	NA / CA	Total contracted procurement volume (for a specific year)		Contract Management	Core	Assessment of the total contracted procurement volume for a specific year	Contract	= ∑ contracted procurement volume	
	NA / CA	Deviation between procurement volume estimated at planning and actual contracted procurement volume (in %)		Contract Management	Core	Assessment of the deviation between the procurement volume estimated at planning and the actual contracted procurement volume	CA / Contract	= (Total estimated procurement volume - total contracted procurement volume) / total estimated procurement volume	
	NA / CA	Share of contracts terminated		Contract Management	Aspirational	Assessment of the number of contracts terminated prior to their planned end date/ Active contracts	Contract	= Number of contracts terminated / Total Number of contracts	
	NA / CA	Procurement spent (yearly)		Contract Management	Core	Assessment of the total procurement spent by the entity	CA	= Procurement spent	
	NA / CA	Procurement spent / procurement category		Contract Management	Core	Assessment of the procurement procedures spent per category	CA	= Procurement spent by category/ Total procurement spent	
	NA / CA	Average difference between cost of the contract at the award and the real cost paid (in %)		Contract Management	Aspirational	Assessment of unforeseen cost evolution (difference between the initially agreed cost and cost paid at the end of the contract)	Contract	= ∑ (cost paid - cost of the contract at the award)/ Number of contracts with payments performed	
Efficiency tools	NA / CA	Share of procurement volume spent through efficiency tools		Contract Management	Core	Assessment of the procurement volume spent through efficiency tools	CA	= Volume of procurement spent through efficiency tools/ Total procurement volume spent	
	NA / CA	Share of procurement volume spent through efficiency tools developed by other entities (CPBs)		Contract Management	Aspirational	Assessment of the procurement volume spent through efficiency tools developed by other entities	CA	= Volume of procurement spent through efficiency tools developed by other entities / Total procurement volume spent	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	NA / CA	Number of active FA		Contract Management	Core	Assessment of the number of active FA	CA	= Number of active FA	
	NA / CA	Number of active DPS		Contract Management	Core	Assessment of the number of active DPS	CA	= Number of active DPS	
	NA / CA	Number of contracts derived from FAs		Contract Management	Core	Assessment of the number of contracts derived from FAs	CA	= Number of contracts derived from FAs	
	NA / CA	Number of contracts derived from DPSs		Contract Management	Core	Assessment of the number of contracts derived from DPSs	CA	= Number of contracts derived from DPSs	
	NA / CA	Share of procurement spent on FA		Contract Management	Aspirational	Assessment of the share of procurement spent by the entity on FAs	contract	= Procurement spent on FA / Total procurement spent	
	NA / CA	Share procurement spent on DPS		Contract Management	Aspirational	Assessment of the share of procurement spent by the entity on DPS	Contract	= Procurement spent on DPS / Total procurement spent	
	NA / CA	Share procurement spent on E-auctions		Contract Management	Aspirational	Assessment of the share of procurement spent by the entity on e-auctions	Contract	= Procurement spent on e-auctions / Total procurement spent	
Contract modification	NA / CA	Share of contracts with modifications		Contract Management	Core	Assessment of the share of contracts with modifications	Contract	= Number of contracts with modifications / Active contracts	
	NA / CA	Share of contracts with cost modifications		Contract Management	Aspirational	Assessment of the share of contracts with cost modifications	Contract	= Number of contracts with cost modifications / Active contracts	
	NA / CA	Number of contracts with modifications on delivery time		Contract Management	Aspirational	Assessment of the number of contracts with modifications on delivery time	Contract	= Number of contracts with modifications on delivery time	
	NA / CA	Share of contracts with modifications on delivery time		Contract Management	Aspirational	Assessment of the share of contracts with modifications on delivery time	Contract	= Number of contracts with modifications on delivery time / contracts	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	NA / CA	Difference between initial time delivery and effective time delivery in days		Contract Management	Aspirational	Assessment of changes (in days) of delivery time	Contract	=∑(Initial time delivery - real time delivery) in days / Number of contracts	
	CA	Time to process contract modification		Contract Management	Aspirational	Assessment of time to process contract modification (in days)	Contract	= Number in days to process contract modifications	
Professionali-sation	NA	Recognition of public procurement as a profession		All stages	Aspirational	Assessment of whether public procurement is recognised as a standalone profession requiring specific knowledge and skills	National	Yes / No	
	NA / CA	Existence of strategic framework on professionalization		All stages	Aspirational	Assessment of whether a strategic framework on professionalization is in place (either at central or at CA- level)	CA-specific / national	Yes / No	
	NA	Existence of higher education programmes dedicated to public procurement		All stages	Aspirational	Assessment of whether higher education programmes dedicated to public procurement are in place	National	Yes / No	
	NA / CA	Existence of a competency model		All stages	Aspirational	Assessment of whether a competency model for public procurement is in place (either at central or at CA-level)	CA-specific / national	Yes / No	
	NA	Existence of a certification framework		All stages	Aspirational	Assessment of whether a certification framework is in place at national level	National	Yes / No	
	NA	Mandatory training requirement/ year		All stages	Aspirational	Assessment of whether mandatory training requirements are in place	National	Yes / No	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	NA / CA	Number of trained procurement professionals per year		All stages	Aspirational	Assessment of the number of trained procurement professionals per year	CA-specific / national	= ∑ of trained procurement professionals per year	
	NA / CA	Share of trained procurement professionals per year (out of total procurement professionals)		All stages	Aspirational	Assessment of the share of trained procurement professionals per year	CA-specific / national	= Number of trained procurement professionals in year X / total number of procurement professionals	
	NA	Share of certified procurement staff (out of total public procurement staff)		All stages	Aspirational	Assessment of the share of certified procurement staff (out of total procurement staff)	National	= Number of certified procurement staff / total number of procurement professionals	
Payment	NA / CA	Average payment timeline		Contract Management	Aspirational	Assessment of the average payment timeline	Contract	=∑ payment timeline / Number of paid invoices	
	NA / CA	Number of advanced payments		Contract Management	Aspirational	Assessment of the number of advanced payments provided to suppliers	Contract	= Number of advanced payments	
General performance	CPB	Share of procurement conducted by CPB out of total public procurement (volume)		Contract Management	Core	Assessment of the share of public procurement volume conducted by CPB out of total public procurement volume	Tender	= Total volume of procurement procedures conducted by CPB/ Total volume of public procurement	
	CPB	Share of procurement procedures conducted by CPB out of total public procurement procedures (number)		Contract Management	Core	Assessment of the share of procurement procedures conducted by CPB out of total public procurement procedures	Tender	=Total number of procurement procedures conducted by CPB / Total volume of public procurement procedures	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	CPB	Share of CPB procurement spent by category of entities	by Central Authorities	Contract Management	Core	Assessment of the volume of the actual spent through CPB by central authorities out of total procurement volume by CPB	Contract	= Total volume of actual spent through CPB by central authorities / Total volume of procurement by CPB	
	CPB		by Regional Authorities	Contract Management	Core	Assessment of the volume of the actual spent through CPB by regional authorities out of total procurement volume by CPB	Contract	= Total volume of actual spent through CPB by regional authorities / Total volume of procurement by CPB	
	CPB		by Local Authorities	Contract Management	Core	Assessment of the volume of the actual spent through CPB by local authorities out of total procurement volume by CPB	Contract	= Total volume of actual spent through CPB by local authorities / Total volume of procurement by CPB	
	CPB		by Other Authorities	Contract Management	Core	Assessment of the volume of the actual spent through CPB by other authorities out of total procurement volume by CPB	Contract	=Total volume of actual spent through CPB by other authorities / Total volume of procurement by CPB	
	CPB	Share of CAs using CPB services without obligation	Central Authorities	Contract Management	Aspirational	Assessment of the number of CA that are using CPB services and have no obligation	CA-specific	= Total number of central authorities using CPB services without obligation/ Total number of central authorities	
	CPB		Regional Authorities	Contract Management	Aspirational			= Total number of regional authorities using CPB services without obligation/ Total Number of regional authorities	
	CPB		Local Authorities	Contract Management	Aspirational			= Total number of local authorities using CPB services without obligation/ Total Number of Local authorities	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	CPB		Other Authorities	Contract Management	Aspirational			= Total number of other authorities using CPB services without obligation / Total number of other authorities	
	CPB	Number of FA	Complete FA, single supplier	Contract Management	Aspirational	Assessment of the number of types of FA		= Number of complete single supplier FA	
	CPB		Incomplete FA, single supplier	Contract Management	Aspirational			= Number of incomplete single supplier FA	
	CPB		Complete FA, multiple suppliers	Contract Management	Aspirational			= Number of complete multiple supplier FA	
	CPB		Incomplete FA, multiple suppliers	Contract Management	Aspirational			= Number of incomplete multiple supplier FA	
	CPB	Average number of purchase orders (by CA as clients of CPB) per FA		Contract Management	Aspirational	Assessment of the number of purchase orders per framework agreement		= ∑Number of purchase orders / = ∑ framework agreement	
	CPB	Existence of a market place / catalogue for below threshold procurement		Contract Management	Aspirational	Assessment of the existence of a market place / catalogue for below the threshold procurement		Yes/No	
Business intelligence	CPB	Existence of methodologies to conduct market analysis		Pre-tendering	Aspirational	Assessment of whether a methodology to conduct market analysis is in place		Yes/No	
	CPB	Existence of methodologies to conduct market engagement		Pre-tendering	Aspirational	Assessment of whether a methodology to conduct market engagement is in place		Yes/No	

Sub-Category	Type of user	Indicator (Name)	Sub-indicator (if applicable)	Procurement stage	Core Vs Aspirational	Metric Description	Level of data:	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No
	CPB	Existence of methodologies to conduct needs analysis		Pre-tendering	Aspirational	Assessment of whether a methodology to conduct needs analysis is in place		Yes/No	
Economic contribution of the CPB	CPB	Share of public procurement spent by CPB out of GDP		Contract Management	Core	Assessment of the share of the public procurement spent by CPB out of GDP		= Total procurement volume by spent by CPB / GPD	Indicator 6 (b)(a)
Digitalisation	CPB	Existence of zero-paper procurement		All stages	Aspirational	Assessment of whether conducting public procurement with the CPB is zero paper		Yes/No	Indicator 7

-Note: Level of data : tender level / contract, CA specific, national

Strategic indicators

Sub-Category	Type of user	Indicator (Name)	Procurement stage	Core VS Aspirational	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
GPP	NA / CA	Share of procurement procedures with GPP criteria	Pre-tendering / tendering	Core	Assessment of the share of procurement procedures with GPP criteria (in number of procedures).	Tender	= Number of procurement procedures with GPP criteria/ Total number of procurement procedures	
	NA / CA	Share of procurement volume with GPP criteria	Pre-tendering / tendering	Core	Assessment of the share of procurement volume with GPP criteria	Tender	= Procurement volume with GPP criteria / Total procurement volume	
	NA / CA	Share of procurement procedures with GPP criteria applicable to subcontractors	Pre-tendering / tendering	Aspirational	Assessment of the share of procurement procedures with GPP criteria applicable to subcontractors	Tender	= Number of procurement procedures with GPP criteria applicable to subcontractors / Total number of procurement procedures with GPP criteria	
	NA / CA	Share of procurement procedures with GPP criteria applicable to supply chain	Pre-tendering / tendering	Aspirational	Assessment of the share of procurement procedures with GPP criteria applicable to the supply chain	Tender	= Number of procurement procedures with GPP criteria applicable to the supply chain / Total number of procurement procedures with GPP criteria	
	NA / CA	Number of procurement procedures using LCC	Pre-tendering / tendering	Core	Assessment of the number of procurement procedures using LCC	Tender	= ∑ of procurement procedures using LCC	
	NA / CA	Share of procurement procedures using LCC	Pre-tendering / tendering	Core	Assessment of the share of procurement procedures using LCC	Tender	= Number of procurement procedures using LCC / Total number of procurement procedures	
	NA / CA	Share of procedures with GPP performance clauses	Pre-tendering / tendering	Aspirational	Assessment of the share of tenders procedures GPP-related performance clauses	Tender	= Number of procurement procedures with GPP performance clauses / Total number of procurement procedures	

Sub-Category	Type of user	Indicator (Name)	Procurement stage	Core VS Aspirational	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
	NA / CA	Share of the number of contracts with GPP criteria	Contract management	Core	Assessment of the share of the number of contracts with GPP criteria	Tender	= Number of contracts with GPP criteria/ Total number of contracts	
	NA / CA	Share of procurement volume (contracts) with GPP criteria	Contract management	Core	Assessment of the share of procurement volume (contracts) with GPP criteria	Tender	= Procurement volume with GPP criteria (from contracts) / Total procurement volume (from contracts)	
	NA / CA	Share of contracts with contractual breach of the GPP criteria	Contract management	Aspirational	Assessment of the share of contracts presenting a contractual breach of GPP criteria.	Tender	= Number of contracts presenting a contractual breach of GPP criteria / Total Contracts with GPP criteria	
	NA / CA	Share of contracts with GPP criteria applicable to subcontractors and supply chains	Contract management	Aspirational	Assessment of the share of contracts with GPP criteria applicable to Subcontractors and supply chains	Tender	= Number of contracts with GPP criteria applicable to Subcontractors and supply chains / Total number of contracts with GPP criteria	
Social policies	NA / CA	Share of procurement procedures with social criteria	Pre-tendering / tendering	Core	Assessment of the share of procurement procedures with social criteria	Tender	= Number of procurement procedures with social criteria / Total number of procurement procedures	
	NA / CA	Procurement volume with social criteria	Pre-tendering / tendering	Core	Assessment of the procurement volume with social criteria	Tender	= ∑ of volume of procurement procedures with social criteria	
	NA / CA	Share of procurement volume with social criteria	Pre-tendering / tendering	Core	Assessment of the share of procurement volume with social criteria	Tender	= Procurement volume with social criteria / Total procurement volume	
	NA / CA	Share of procurement procedures with social criteria applicable to subcontractors	Pre-tendering / tendering	Aspirational	Assessment of the share of procurement procedures with social criteria applicable to subcontractors	Tender	= Number of procurement procedures with social criteria applicable to subcontractors / Total number of procurement procedures with social criteria	
	NA / CA	Share of procurement procedures with social criteria applicable to the supply chain	Pre-tendering / tendering	Aspirational	Assessment of the share of procurement procedures with social criteria applicable to the supply chain	Tender	= number of procurement procedures with social criteria applicable to the supply chain / Total number of procurement procedures with social criteria	
	NA / CA	Share of procurement procedures with social	Pre-tendering / tendering	Aspirational	Assessment of the share of procurement procedures with social performance	Tender	= Number of procurement procedures with social performance clauses / Total	

Sub-Category	Type of user	Indicator (Name)	Procurement stage	Core VS Aspirational	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
		performance clauses			clauses		number of procurement procedures	
	NA / CA	Share of procurement procedures including gender considerations	Pre-tendering / tendering	Aspirational	Assessment of the share of procurement procedures including gender considerations (e.g. women-owned enterprises)	Tender	= Number of procurement procedures with gender considerations / Total number of procurement procedures	
	NA / CA	Share of contracts with social criteria	Contract management	Core	Assessment of the share of contracts with social criteria	Tender	= Number of contracts with social criteria / Total number of contracts	
	NA / CA	Procurement volume (from contracts) with social criteria	Contract management	Core	Assessment of the procurement volume from contracts with social criteria	Tender	= ∑ of volume of contracts with social criteria	
	NA / CA	Share of procurement volume (from contracts) with social criteria	Contract management	Core	Assessment of the share of procurement volume from contracts with social criteria	Tender	= Procurement volume with social criteria (from contracts) / Total procurement volume (from contracts)	
	NA / CA	Share of contracts in contractual breach of social criteria	Contract management	Aspirational	Assessment of the share number of contracts presenting a contractual breach of social criteria	Tender	= Number of contracts presenting a contractual breach of social criteria / Contracts with social criteria	
	NA / CA	Share of contracts with social criteria applicable to Subcontractors	Contract management	Aspirational	Assessment of the share of contracts with social criteria applicable to Subcontractors	Tender	= Number of contracts with social criteria applicable to Subcontractors / Total number of contracts with social criteria	
	NA / CA	Share of contracts with social criteria applicable to the supply chain	Contract management	Aspirational	Assessment of the share of contracts with social criteria applicable to the supply chain	Tender	= Number of contracts with social criteria applicable to the supply chains / Total number of contracts with social criteria	
SMEs	NA / CA	Average number of bidders who are SMEs	Tendering	Core	Assessment of the average number of SMEs bidders	Tender	= ∑ SME bidders / Number of procurement procedures	
	NA / CA	Share of SME bidders	Tendering	Core	Assessment of the share of SMEs bidders	Tender	= Number of SME bidders / Total number of bidders	
	NA / CA	Share of SME qualified bidders	Tendering	Aspirational	Assessment of the participation of qualified SME bidders (competition indicator)	Tender	= Number of qualified SME bidders / Total number of qualified bidders	

Sub-Category	Type of user	Indicator (Name)	Procurement stage	Core VS Aspirational	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
	NA / CA	Average number of SMEs participating in above the threshold procurement procedures	Tendering	Aspirational	Assessment of the average SME participation in above the threshold procurement	Tender	= ∑ SME bidders / Number of above threshold procedures	
	NA / CA	Share of SMEs participating in above the threshold procurement procedures	Tendering	Aspirational	Assessment of the share of SME participation in above the threshold procurement	Tender	= Number of SME bidders participating in above threshold tenders / Total number of bidders in above threshold tenders	
	NA / CA	Share of procurement procedures requiring a bid or performance bond	Tendering	Aspirational	Assessment of the share of procurement procedures requiring a bid or performance bond	Tender	= Procurement procedures requiring a bid or performance bond / Total number of procurement procedures	
	NA / CA	Share of procurement value of tenders requiring a bid or performance bond	Tendering	Aspirational	Assessment of the share of procurement volume requiring a bid or performance bond	Tender	= Financial volume of procurement procedures requiring a bid or performance bond / Total number of procurement procedures	
	NA / CA	Share of contracts awarded to SMEs	Contract management	Core	Assessment of the share of contracts awarded to SMEs	Tender	= Number of contracts awarded to SMEs / Total number of contracts	
	NA / CA	Volume of contracts awarded to SMEs	Contract management	Core	Assessment of the volume of procurement contracts awarded to SMEs	Tender	= ∑ of the volume of procurement contracts awarded to SMEs	
	NA / CA	Share of procurement volume of contracts awarded to SMEs	Contract management	Core	Assessment of the share of the procurement volume (from contracts) awarded to SMEs	Tender	= Procurement volume (from contracts) awarded to SMEs / Total procurement volume	
	NA / CA	Share of contracts above the threshold awarded to SMEs (in numbers)	Contract management	Aspirational	Assessment of the share of contracts above the threshold awarded to SMEs	Tender	= Number of contracts above threshold awarded to SMEs / Total number of contracts above threshold	
	NA / CA	Share of contracts above the threshold awarded to SMEs (in procurement volume)	Contract management	Aspirational	Assessment of the share of procurement volume above the threshold awarded to SMEs	Tender	= Procurement volume of contracts above threshold awarded to SMEs / Total procurement volume above threshold	
	NA / CA	Procurement volume of above the threshold contracts awarded to SMEs	Contract management	Aspirational	Assessment of the procurement volume above the threshold awarded to SMEs	Tender	= ∑ of procurement volume of contracts above threshold awarded to SMEs	

Sub-Category	Type of user	Indicator (Name)	Procurement stage	Core VS Aspirational	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
	NA / CA	Share of contracts with declared SME subcontractors	Contract management	Aspirational	Assessment of the share of contracts with declared SME subcontractors	Tender	= Number of contracts with declared subcontractors / Total number of contracts	
Innovation	NA / CA	Number of procurement procedures aimed at innovation (based on the national framework)	Pre-tendering / tendering	Core	Assessment of the number of procurement procedures aimed at innovation (as defined by national framework)	Tender	= ∑ of procurement procedures aimed at innovation	
	NA / CA	Share of procurement procedures aimed at innovation (based on the national framework)	Pre-tendering / tendering	Core	Assessment of the share of procurement procedures aimed at innovation (as defined by national framework)	Tender	= Number of procurement procedures aimed at innovation / Total number of procurement procedures	
	NA / CA	Procurement volume of procurement procedures aimed at innovation (based on the national framework)	Pre-tendering / tendering	Core	Assessment of the procurement volume of procurement procedures aimed at innovation (based on the national framework)	Tender	= ∑ procurement volume of procurement procedures aimed at innovation	
	NA / CA	Share of procurement volume of procurement procedures aimed at innovation(based on the national framework)	Pre-tendering / tendering	Core	Assessment of the share of the procurement volume of procurement procedures aimed at innovation (based on the national framework)	Tender	= Procurement volume of procurement procedures t aimed at innovation (based on the national framework) / Total procurement volume	
	NA / CA	Share of competitive procedures with negotiation	Pre-tendering / tendering	Aspirational	Assessment of the share of procedures, in which suppliers and contracting authorities enter a negotiation	Tender	= Number of competitive procedures with negotiation / Total number of procurement procedures	
	NA / CA	Share of procurement volume of competitive procedures with negotiation	Pre-tendering / tendering	Aspirational	Assessment of the volume of procedures, in which suppliers and contracting authorities enter a negotiation	Tender	= Procurement volume of competitive procedures with negotiation / Total procurement volume	
	NA / CA	Number of contracts awarded to start ups (if applicable)	Contract management	Aspirational	Assessment of the number of contracts awarded to start ups	Tender	= ∑ contracts awarded to start ups	
	NA / CA	Share of contracts awarded to start ups (if applicable)	Contract management	Aspirational	Assessment of the share of contracts awarded to start ups	Tender	= Number of contracts awarded to start ups / Total number of contracts	
	NA / CA	Procurement volume of contracts awarded to start ups (if applicable)	Contract management	Aspirational	Assessment of the procurement volume awarded to start ups	Tender	= ∑ procurement volume from contracts awarded to start ups	

Sub-Category	Type of user	Indicator (Name)	Procurement stage	Core VS Aspirational	Metric description	Level of data :	Calculation/ Data requirements	Contribution to MAPS indicator (indicator number/No)
	NA / CA	Share of procurement volume of contracts awarded to start ups (if applicable)	Contract management	Aspirational	Assessment of the share of procurement volume awarded to start ups	Tender	= Procurement volume from contracts awarded to start ups / Total procurement volume (from contracts)	
	NA / CA	Number of contracts aimed at innovation	Contract management	Core	Assessment of the number of contracts aimed at innovation	Tender	= ∑ contracts aimed at innovation	
	NA / CA	Share of contracts aimed at innovation	Contract management	Core	Assessment of the share of contracts aimed at innovation	Tender	= Number of contracts aimed at innovation/ Total number of contracts	
	NA / CA	Procurement volume of contracts aimed at innovation	Contract management	Core	Assessment of the procurement volume of contracts aimed at innovation	Tender	= ∑ procurement volume of contracts aimed at innovation	
	NA / CA	Share of procurement volume of contracts aimed at innovation	Contract management	Core	Assessment of the share of procurement volume of contracts aimed at innovation	Tender	= Procurement volume of contracts aimed at innovation / Total procurement volume from contracts	

Note: Level of data : tender level / contract, CA specific, national