Infrastructure Transparency Initiative

March 2021

DISCLOSURE MANUAL

Abbreviations

CoST	CoST – the Infrastructure Transparency Initiative
CoST IDS	CoST Infrastructure Data Standard
IAD	Infrastructure analytical dashboard
OC4IDS	Open Contracting for Infrastructure Data Standard
OCDS	Open Contracting Data Standard
OCP	Open Contracting Partnership
ODS	Open Data Services
PPIAF	Public–Private Infrastructure Advisory Facility
PPP	Public–private partnership
SISOCS	Information and Monitoring System for Works and Supervision Contracts

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Table of Contents

Figures

Tables

Annexes

1. Introduction

1.1 CoST's purpose and approach

The purpose of CoST – the Infrastructure Transparency Initiative (CoST) is to improve performance in the procurement[1] of public infrastructure by identifying, highlighting and helping to address the risks of inefficiency, mismanagement and corruption. Good performance in this regard means the achievement by procuring entities of value for money by procuring:

- the right infrastructure (requiring effective planning); through
- fair processes (requiring effective tender management); that deliver
- infrastructure as contracted (requiring effective contract administration); that results in
- relevant service provision (requiring effective stakeholder engagement).

In working towards its vision of quality infrastructure, stronger economies and better lives, CoST enables a multi-stakeholder approach in the disclosure, validation and use of infrastructure data. This serves to improve transparency, participation and accountability, and contributes to the achievement of quality infrastructure that meets people's needs.

The approach finds practical expression through CoST's four core features of: disclosure, assurance, multi-stakeholder working and social accountability. These provide a global standard for enhancing infrastructure transparency and facilitating accountability. While the standard is universally applied by CoST members in low, medium and high-income countries, it is adapted for appropriate application in different political, economic and social contexts.

[1] Procurement is not limited to tender management, but refers to the whole process of creating, managing, and fulfilling contracts. This is consistent with the CoST approach of taking an interest in all stages of contract and project cycles.

DISCLOSURE

Disclosure is the publication of data from infrastructure projects. Data is disclosed by procuring entities at key stages throughout the entire project life cycle in the CoST Infrastructure Data Standard (CoST IDS) or the Open Contracting for Infrastructure Data Standard (OC4IDS) format. These ensure that data related to the purpose, scope, impact, costs and execution of infrastructure projects is open and accessible to the public, and is disclosed in a timely manner. Specified data points or 'items' defined in these standards relate to the identification, preparation, tender management, implementation and completion stages of projects or related contracts.

ASSURANCE

Assurance is an independent review that starts by validating the consistency and completeness of the disclosed data. Drawing on that data, assurance then turns it into compelling information, highlighting issues of concern and noting areas of good practice. This entails communicating issues both visually and in plain language. By making it easier for all stakeholders to be aware of what is happening, this helps to strengthen accountability mechanisms while allowing decision makers to be more readily held to account.

MULTI-STAKEHOLDER WORKING

To be trusted by all parties, the above activities related to disclosure and assurance must be seen to be independent. To this end, multi-stakeholder working brings together government, the private sector and civil society in a concerted effort to pursue the common goal of improving transparency and accountability in public infrastructure. This is typically achieved through a multi-stakeholder group, where each set of stakeholders has an equal voice in leading a CoST national programme in accordance with accepted principles. Policy decisions made by the multi-stakeholder group are then implemented by a CoST member secretariat that manages the programme on a day-to-day basis.

SOCIAL ACCOUNTABILITY

Stakeholders such as the media and civil society play an important role in holding decision makers to account. Social accountability refers to efforts made to ensure that the disclosed data and assurance reports are taken up and used by stakeholders – especially civil society and the private sector – to help strengthen accountability and deliver practical improvements. Building on the foundation laid by disclosure and accountability, CoST can provide training in the most constructive and effective means of making use of those resources.

1.2 Purpose and structure of this manual

The primary purpose of this manual is to provide guidance to help design and strengthen disclosure processes that ensure the timely and reliable disclosure of data by public infrastructure procuring entities, both proactively and reactively.

A secondary objective is that the disclosure through a public channel complies with the CoST IDS or the OC4IDS, at national or sub-national level, and that this becomes one of the main sources for anyone who wants to use the data. Such users may include contract monitors, journalists, oversight authorities, assurance professionals or evaluator teams applying the CoST Assurance Manual or the CoST Infrastructure Transparency Index Manual.

This manual contains guidance and useful tools of value to anyone with an interest in, or responsibility for, a CoST disclosure process. However, it is primarily aimed at members of CoST secretariats and the multi-stakeholder groups who will be supporting the design and implementation of disclosure processes in conjunction with procuring entities responsible for disclosing data.

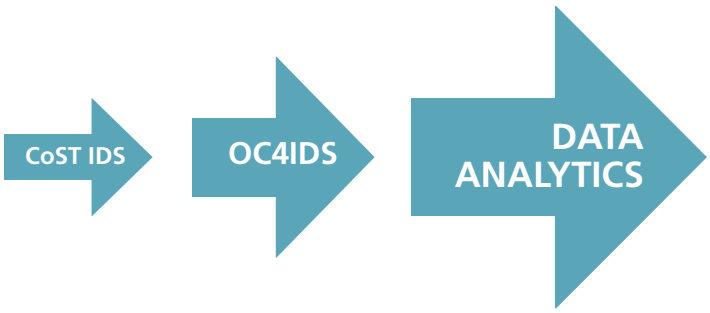


Figure 1.1: The CoST disclosure journey

As illustrated in **Figure 1.1**, the structure of the manual reflects the CoST disclosure journey, from the CoST IDS to the OC4IDS and infrastructure analytical dashboards (IAD).

The following chapters provide a concise description of: the CoST IDS, the OC4IDS and infrastructure analytical dashboards. The chapters make reference to various tools and resources that are described in the annexes.

2. The CoST Infrastructure Data Standard

2.1 Understanding the CoST Infrastructure Data Standard

The CoST Infrastructure Data Standard (CoST IDS) is a standard list of data and information that should be disclosed, both proactively and reactively, by procuring entities during the complete project life cycle.

Procuring entities are responsible for proactively disclosing a minimum of 40 data points as set out in the CoST IDS (see **Table 2.1**). Proactive disclosure occurs regularly as a matter of 'business as usual' without the need for any requests for information from citizens or other stakeholders.

PROJECT STAGE	PROJECT LEVEL DATA	PROCUREMENT STAGE	CONTRACT LEVEL DATA
Last updated	**Date**	**Tender management and implementation**	**21.** Procuring entity **22.** Procuring entity contact details **23.** Procurement process **24.** Number of firms tendering **25.** Cost estimate **26.** Contract administration entity **27.** Contract type **28.** Contract title **29.** Contract firm(s) **30.** Contract price **31.** Contract scope of work 32. Contract start date **33.** Contract duration **34.** Contract status (current) **35.** Variation to contract price **36.** Escalation of contract price **37.** Variation to contract duration 38. Variation to contract scope **39.** Reasons for price changes **40.** Reasons for scope and duration changes
Identification	**1.** Project reference number **2.** Project owner **3.** Sector, subsector 4. Project name **5.** Project location **6.** Purpose **7.** Project description		
Preparation	**8.** Project scope (main output) **9.** Environmental impact **10.** Land and settlement impact 11. Contact details **12.** Funding sources 13. Project budget **14.** Project budget approval date		
Completion	**15.** Project status (current) **16.** Completion cost (projected) **17.** Completion date (projected) **18.** Scope at completion (projected) **19.** Reasons for project changes **20.** Reference to audit and evaluation reports		

Table 2.1 Project data for proactive disclosure

Procuring entities are also responsible for reactively disclosing the 27 items of information set out in the list for reactive disclosure as set out in **Table 2.2**. Reactive disclosure means the provision or publication of information upon request. This list is not exhaustive and additional data points may be added that are not included. If there is not a legal or administrative mandate to disclose reactively any of these data points, it is important to agree explicitly with procuring entities what they are willing to release into the public domain.

PROJECT STAGE	PROJECT LEVEL INFORMATION	PROCUREMENT STAGE	CONTRACT LEVEL INFORMATION
Identification	**1.** Project brief or feasibility study **2.** Project officials and roles	**Tender management and implementation**	**15.** Contract officials and roles **16.** Procurement method 17. Tender documents **18.** Tender evaluation results **19.** Project design report **20.** Contract agreement and conditions **21.** Registration and ownership of firms **22.** Specifications and drawings **23.** List of variations, changes, amendments **24.** List of escalation approvals **25.** Quality assurance reports **26.** Disbursement records or payment certificates **27.** Contract amendments
Preparation	**3.** Multi-year programme and budget **4.** Environmental and social impact assessment **5.** Resettlement and compensation plan **6.** Financial agreement **7.** Procurement plan **8.** Project approval decision		
Completion	**9.** Implementation progress reports **10.** Budget amendment decision **11.** Project completion report **12.** Project evaluation report **13.** Technical audit reports **14.** Financial audit reports		

Table 2.2 Project information for reactive disclosure

2.1.1 ELEMENTS FOR DISCLOSURE PER PROJECT STAGE

Figure 2.1 provides a summary of the number of elements of proactive and reactive disclosure required by the CoST IDS at the identification, preparation and completion stages of a project and at the tender management and contract implementation stages of the procurement of principal contracts.

It should be noted that in some jurisdictions not all data points are available, or they are known under different names. Furthermore, some data points may be obtained and disclosed at different stages from the ones indicated above.

Different contracts may contribute to a single project, so data points related to the tender management and implementation stages of contract procurement are therefore applicable to each such contract. These may include contracts related to planning, design, construction and supervision, or a combination of two or more of them. As illustrated in **Figure 2.2**,

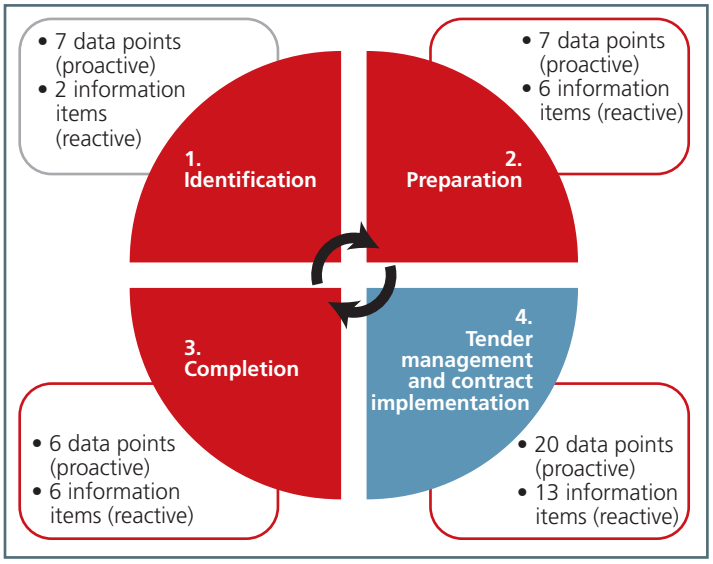


Figure 2.1 Data and information per project stages recommended by the CoST IDS

this shows that at least 20 data points should be disclosed proactively for each one of the contracts in a project.

The following sections provide a short definition of each of the data points included in the CoST IDS, with examples provided where applicable. The elements recommended for reactive disclosure are underlined.

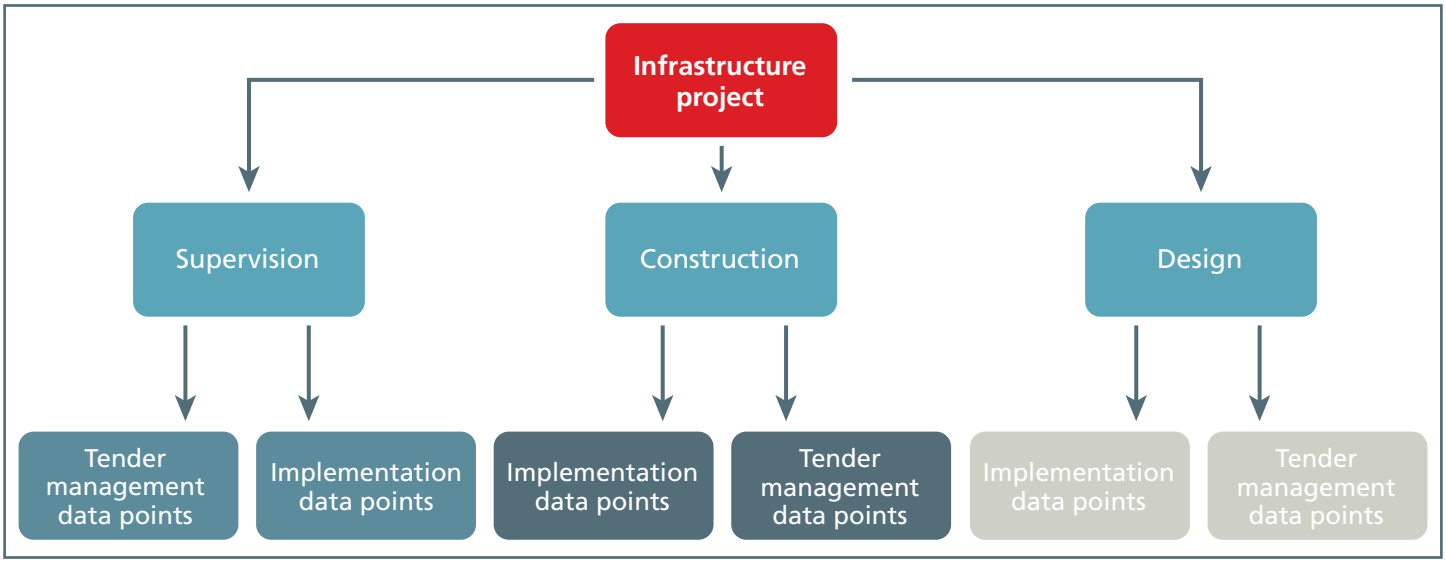


Figure 2.2 Basic contracts in an infrastructure project

2.1.1.1 PROJECT IDENTIFICATION

In relation to project identification, the CoST IDS recommends disclosing nine elements as shown in **Table 2.3** and explained below.

PROACTIVE DISCLOSURE	REACTIVE DISCLOSURE
a.1. Project reference number	**a.8.** Project officials and roles
a.2. Project owner	**a.9.** Project brief or feasibility study
a.3. Sector, subsector	
a.4. Project name	
a.5. Project Location	
a.6. Purpose	
a.7. Project description	

Table 2.3 Data and information to be disclosed during project identification

- **a.1. Project reference number**: local project identifier defined by the project owner (e.g. "HAM1J9-2017").
- **a.2. Project owner**: name of the sponsoring public entity in charge of the project (e.g. "Ministry of Public Works").
- **a.3. Sector, subsector**: select from a list of sectors relevant to the specific context, such as housing, transport, energy and water, with subsectors for each sector, so transport could be subdivided into national highway, local road, railway, port and airport (e.g. "Transport, railway").
- **a.4. Project name**: specify the project name (e.g. "Catthorpe Viaduct Replacement").

- **a.5. Project location**: briefly specify location of the project (e.g. "At the intersection of the M1, M6 and A14 in Leicestershire, approx. 6 km from Rugby").
- **a.6. Purpose**: specify the socio-economic purpose of the project (e.g. "Replacement of an existing structure that is in poor condition and which poses a risk to the highway network").
- **a.7. Project description**: concise description and details of the project (e.g. "Demolish existing viaduct and complete detailed design, construct new viaduct, start works on site July 2017, open viaduct to traffic December 2018").
- **a.8. Project officials and roles**: high level officials managing the project and their role in sponsoring public entity.
- **a.9. Project brief or feasibility study**: documentation carried out for the project, providing information on net benefits or costs of the proposed goods, works or services.

2.1.1.2 PROJECT PREPARATION

In relation to project preparation, the CoST IDS recommends disclosing 13 elements as shown in **Table 2.4** and explained below.

PROACTIVE DISCLOSURE	REACTIVE DISCLOSURE
b.1. Project scope (main output)	**b.8.** Multi-year programme and budget
b.2. Environmental impact	**b.9.** Environmental and social impact assessment
b.3. Land and settlement impact	**b.10.** Resettlement and compensation plan
b.4. Contact details	**b.11.** Financial agreement
b.5. Funding sources	**b.12.** Procurement plan
b.6. Project budget	**b.13.** Project approval decision
b.7. Project budget approval date	

Table 2.4 Data and information to be disclosed during project preparation

- **b.1. Project scope**: main outputs from the project that are being taken forward into construction (type, quantity, unit) (e.g. "Upgrading of 48 km gravel road to bitumen standard. This includes construction of four major bridges of total length of 210 m, 16 box culverts ranging from 1.5 m x 2 m to 4 m x 4 m sizes, installation of 3001 m pipe culverts, 56 400 m^3 rock fill, installation of road signs and road marking").
- **b.2. Environmental impact**: briefly list the main environmental impacts and associated measures for this project and include any environmental impact category officially assigned. Impacts may include those that are positive, negative, direct, indirect, or accumulative. Measures may include those that are aimed at prevention, mitigation, or compensation (e.g. "Category II: limited environmental and social impact due to upgrading of existing road alignment. Risks identified related to dust control and pollution of watercourses during construction, including at borrow pit and quarry locations and site safety during construction. Mitigation measures are set out in environmental and social management plan forming part of the contract. Environmental compliance manager appointed by the contractor to manage the implementation of this plan. The borrow pit reinstatement component includes a complementary intervention to convert one of the borrow puts into a safe water source for livestock").
- **b.3. Land and settlement impact**: briefly state the amount of land and property, if any, that was acquired for the project, making reference where possible to any officially applicable standards that have been followed and to associated mitigation measures (e.g. "5 km^2 of land acquired. Key issues include relocation of a burial site, relocation of 40 households and disruption to local businesses. Provisions of IFC Performance Standard 5 (Land Acquisition and Involuntary Resettlement - 2012) are included within the contract").

- **b.4. Contact details**: postal and electronic address of the project owner (e.g. "Highways England, 3 Ridgeway, Quinton Business Park, Birmingham, B32 1AF, UK, info@highwaysengland.co.uk").
- **b.5. Funding sources**: name the funding organisation(s) or sources of funding (e.g. "Department for Transport").
- **b.6. Project budget**: specify the projected costs or allocated budget for the project (currency and amount). The budget includes land and property acquisition, environmental mitigation measures, health and safety provisions, client, consultant and contractor costs and value added tax (e.g. "£20.8 million").
- **b.7. Project budget approval date**: day, month, year project budget was authorised (e.g. "17 January 2017").
- **b.8. Multi-year programme and budget**: a detailed breakdown of the budget by period and/or participating funders.
- **b.9. Environmental and social impact assessment**: the precise scope, structure and style vary according to the standard adopted, but this typically documents assessments of environmental impacts, mitigation measures and social impacts for the project. Related health and safety assessment and provisions may also be included if not provided for elsewhere.
- **b.10. Resettlement and compensation plan**: documentation of the procedures followed and actions taken to mitigate adverse effects, compensate losses and provide development benefits to persons and communities otherwise adversely affected by the project.
- **b.11. Financial agreement**: loan or donation agreement with financing conditions.
- **b.12. Procurement plan**: documentation of the procurement processes expected to take place in relation to the project.
- **b.13. Project approval decision**: document that evidences the approved budget for the project.

2.1.1.3 TENDER MANAGEMENT AND CONTRACT IMPLEMENTATION

During the tender management stage of each contract within the project, the CoST IDS covers three groups of information and data sets according to the following phases: initiation, award and contracting. The groups have 22 elements that are applicable to each tender process in a project, with each project likely to include multiple contracts for delivering the following assets: planning, design, construction and supervision, or a combination of these. The elements are shown are shown in **Table 2.5** and explained below.

PROACTIVE DISCLOSURE	REACTIVE DISCLOSURE
Initiation	**Initiation**
c.1.1. Procuring entity	**c..1.15.** Procurement method
c.1.2. Procuring entity contact details	**c.1.16.** Tender documents
c.1.3. Procurement process	
Award	**Award**
c.1.4. Number of firms tendering	**c.1.17.** Tender evaluation results
c.1.5. Cost estimate	
Contracting	**Contracting**
c.1.6. Contract administration entity	**c.1.18.** Contract officials and roles
c.1.7. Contract type	**c.1.19.** Contract agreement and conditions
c.1.8. Contract title	**c.1.20.** Registration and ownership of firms
c.1.9. Contract firm(s)	**c.1.21.** Specifications and drawings
c.1.10. Contract price	**c.1.22.** Project design report
c.1.11. Contract scope of work	
c.1.12. Contract start date	
c.1.13. Contract duration	
c.1.14. Contract status (current)	

Table 2.5 Data and information to be disclosed during tender management

- **c.1.1. Procuring entity**: name of the organisation carrying out the tender process (e.g. "Highways Agency").
- **c.1.2. Procuring entity contact details**: postal and electronic address (e.g. "Tanzania National Roads Agency (TANROADS), P.O. Box 11364, Dar es Salaam, Tanzania").
- **c.1.3. Procurement process**: select from a list such as international competitive bidding, national competitive bidding, donor procurement rules, framework, direct award (e.g. "National competitive bidding").
- **c.1.4. Number of firms tendering**: number of firms which submit a tender (e.g. "Five firms tendering").
- **c.1.5. Cost estimate**: currency and amount of the original pre-tender owner's estimate of the contract (e.g. "Task order M279 – £150 952, task order M302 – £381 044, package order 1068 – £120 454").
- **c.1.6. Contract administration entity**: name of the organisation carrying out the contract administrative entity if different from the procuring entity (e.g. "Highways Agency").
- **c.1.7. Contract type**: select from a list such as: design, supervision, design and supervision, design and construction, construction (e.g. "Construction").
- **c.1.8. Contract title**: formal name of the contract and a reference number (e.g. "Contract number 2021–1239: consultancy services for the supervision of upgrading of Magole–Turiani–Mziha road to bitumen standard, lot 1: Magole–Turiani (48.6 km)").

- **c.1.9. Contract firm(s)**: legal name of supplier and registration number if available (e.g. "Skanska Construction UK Limited, company number 879819").
- **c.1.10. Contract price**: currency and price at contract award (e.g. "£17.825 million").
- **c.1.11. Contract scope of work**: main outputs from the contract, such as detailed design, supervision, project management and or type, quantity, unit for construction (e.g. "Design and construction of the new viaduct and associated roadworks, diversion and reinstatement of services, protective measures and demolition of the existing structure").
- **c.1.12. Contract start date**: contract start date or initiation order (day-month-year) (e.g. "19 March 2019").
- **c.1.13. Contract duration**: number of days from contract start date to (anticipated) completion date (e.g. "637 days").
- **c.1.14. Contract status (current)**: select from pre-award, active or closed (e.g. "Active").
- **c.1.15. Procurement method**: specify tendering method using a method list, such as open, selective, limited and direct.
- **c.1.16. Tender documents**: documentation issued to potential suppliers, describing the goals of the contract, such as works and services to be procured, and the bidding process.
- **c.1.17. Tender evaluation results**: report on the evaluation of the bids and the application of the evaluation criteria, including the justification for the award stripped of any data that could be considered as commercially confidential.
- **c.1.18. Contract officials and roles**: name and position of the public official in charge of administration of the contract(s).
- **c.1.19. Contract agreement and conditions**: a copy of the signed contract with the agreed works programme, quality management plan and environmental and social management plan. Consider providing both machine-readable – such as original PDF, Word, or Open Document format files – and a separate document entry for scanned signed pages where this is required.
- **c.2.20. Registration and ownership of firms**: documentation providing details of the registration, including the registration number, registered address and official company name, of each contracted company, together with the best available information about their owners.
- **c.1.21. Specifications and drawings**: detailed technical information about works or services to be provided.
- **c.1.22. Project design report**: normally prepared by the consultant or firm responsible for preparing the design and endorsed by the project owner, this provides a record of the justification for the design approach adopted. It also highlights anticipated technical risks that have been identified and addressed in the process.
- During contract implementation, the CoST IDS covers 11 elements applicable to each of the contracts in a project. These are shown in **Table 2.6** and explained below.

PROACTIVE DISCLOSURE	REACTIVE DISCLOSURE
c.2.1. Variation to contract price	**c.2.7.** List of variations, changes, amendments
c.2.2. Escalation of contract price	**c.2.8.** List of escalation approvals
c.2.3. Variation to contract duration	**c.2.9.** Quality assurance reports
c.2.4. Variation to contract scope	**c.2.10.** Disbursement records or payment certificates
c.2.5. Reasons for price changes	**c.2.11.** Contract amendments
c.2.6. Reasons for scope and duration changes	

Table 2.6 Contract implementation data and information

- **c.2.1. Variation to contract price**: difference between the price at contract award and the current projected price, excluding adjustments due to escalation (e.g. "As a result of contract variations, the contract price has increased by TZS 6.25 billion (14.8 % of the original contract value)").

- **c.2.2. Escalation of contract price**: normally restricted to multi-year contracts, this refers to an adjustment based on the escalation to date of the price of materials, labour, equipment and so on due to inflation or currency fluctuations. It is calculated in accordance with specific contract clauses and related Indices set out in the contract (e.g. "To date, based on the provisions of clause 55 (price adjustment) in the general conditions of contract, the contract price has increased by TZS 3.46 billion (8.2 % of the original contract value)").

- **c.2.3. Variation to contract duration**: difference between original duration at contract award and the current projected duration in days (e.g. "210 days").

- **c.2.4. Variation to contract scope**: any changes between original scope at contract award and the current scope (e.g. "Extending the design standard of town section for Butajira town by 770 m and change in design for section of the road from km 84+300 to km 86 +900 from rural section to town section").

- **c.2.5. Reasons for price changes**: summary of reasons for primary factors (variations or escalation) that have led to changes in contract price (e.g. "Increased quantities of reinforced concrete as a result of adjustments to design to include additional lined drainage channels and escalation in price of diesel").

- **c.2.6. Reasons for scope and duration changes**: summary of reasons for primary of changes including variations that then lead to changes in the scope and duration (e.g. "Updating of design to comply with latest design standard criteria for adopting a 'town' rather than 'rural' cross section. This design review and the late settlement of interim payment certificates contributed to successful claims for additional time").

- **c.2.7. List of variations, changes, amendments**: documentation with details of changes to the duration, price, scope, or other significant features of the contracting process.

- **c.2.8. List of escalation approvals**: document containing a list of the escalations to contract price approved during the project life cycle.

- **c.2.9. Quality assurance reports**: documentation identifying strengths and weaknesses in the underlying processes, to ensure that designs, procedures and practices are fit for purpose in ensuring that the occurrence of defects is minimised and that when defects or mistakes do occur, they are promptly and effectively identified and addressed.

- **c.2.10. Disbursement records or payment certificates**: documentation providing dates and amounts of stage payments made (against total amount) and the source of those payments, or a document certifying that the noted work has been completed and payment to the contractor is approved or made.

- **c.2.11. Contract amendments**: documentation of the amended contract terms, such as addenda, modifications, change orders and variations.

2.1.1.4 PROJECT COMPLETION

During project completion the CoST IDS recommends disclosing 12 elements as shown in **Table 2.7** and explained below.

PROACTIVE DISCLOSURE	REACTIVE DISCLOSURE
d.1. Project status (current)	**d.7.** Implementation progress reports
d.2. Completion cost	**d.8.** Budget amendment decision
d.3. Completion date	**d.9.** Project completion report
d.4. Scope at completion	**d.10.** Project evaluation report
d.5. Reasons for project changes	**d.11.** Technical audit reports
d.6. Reference to audit and evaluation reports	**d.12.** Financial audit reports

Table 2.7 Project completion data and information

- **d.1. Project status (current)**: the current stage of the project. Select from: identification, preparation, tender management, implementation, cancelled, in completion or completed (e.g. "Completed").
- **d.2. Completion cost**: state projected or actual completion cost (currency and amount) (e.g. "£17.927 million").
- **d.3. Completion date**: state projected or actual completion date (day-month-year) (e.g. "9 March 2019").
- **d.4. Scope at completion**: indicate projected or actual scope of project. Aim is to show whether and, if so, how the completed project scope differs from the original project scope. Specify main outputs (type, quantity, unit) (e.g. "Same as original with the following changes: extending the design standard of town section for Butajira town by 770 m; change in design for section of the road from km 84+300 to km 86 +900 from 'rural' section to 'town' section").
- **d.5. Reasons for project changes**: summary of primary reasons for any changes in scope, time and cost (e.g. "Scope and quantities increased due to update of design in accordance with current standards; delays due to late granting of site possession, delayed payment to contractor and inclement weather; cost increases primarily associated with increased scope and price escalation").
- **d.6. Reference to audit and evaluation reports**: reference to publicly available technical and financial audits (e.g. "2019 value for money audit (road authority)").
- **d.7. Implementation progress reports**: documentation on the status of implementation, usually against key milestones.
- **d.8. Budget amendment decision**: document accrediting the approval of any budget expansion or extension for the project.
- **d.9. Project completion report**: this provides: a summary of the objectives of the project, the approach adopted, an overview of progress achieved, challenges encountered and lessons learned. Other documents under this category may be the certification by the relevant contract administrator that the main works were fully completed as specified, and documents related to the formal acceptance by government of the completed infrastructure.
- **d.10. Project evaluation report**: this is generally aimed at understanding and learning lessons from what worked and what did not, including in terms of internal project communication and management processes. Unlike the project completion report, this is primarily focused on the degree to which the project outcomes are demonstrably contributing towards the intended outcomes.
- **d.11. Technical audit reports**: documentation of checks that construction work has been undertaken as specified.
- **d.12. Financial audit reports**: documentation of checks that project financial statements are correct and complete.

2.2 Designing and implementing a disclosure process

The CoST disclosure process requires procuring entities to ensure that information about publicly financed infrastructure projects is open and accessible to the public and disclosed in a timely manner. What is disclosed should be sufficient to inform stakeholders about relevant aspects of the project in a useful way, that is sufficiently timely, accurate and consistent to be capable of being meaningfully analysed and understood.

After reviewing and understanding relevant existing policy and practice related to infrastructure-related data management, including existing disclosure regimes, the key questions that need to be considered when designing and implementing a disclosure process that will assist procuring entities disclose data from their infrastructure projects are as follows.

- Is there a clear legal basis to disclose data? If not, is there a need for a specific disclosure mandate?
- What is already being disclosed and how could the intended scope of disclosure be improved?
- How is data currently generated, collected and managed and what such mechanisms might apply in future?
- How exactly is data currently being disclosed and how might that be improved?
- When exactly is data currently being disclosed and by whom? What approach should ideally be taken in future regarding triggers for, or the timing of, future disclosure.
- What public channels are being used, or will need to be used, to disclose data?
- What related quality assurance and approval processes are already in place, or will need to be established?
- What mechanisms for stakeholder engagement are already in place, or will need to be developed?

In summary, the design and implementation of a thoughtful and informed disclosure process might include eight distinct steps (see **Figure 2.3**).

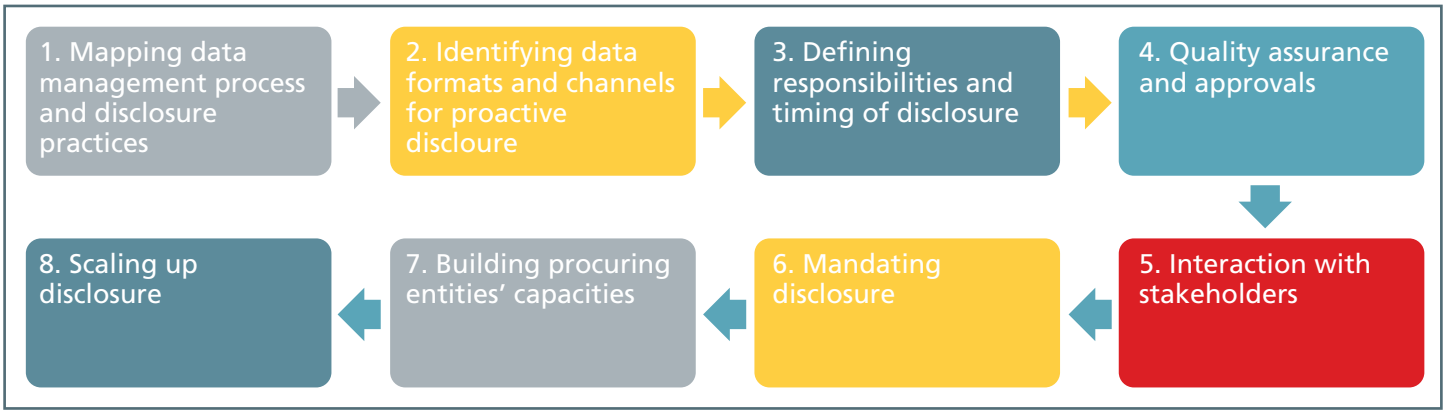


Figure 2.3 Overview of designing and implementing a disclosure process

2.2.1 MAPPING DATA MANAGEMENT PROCESSES AND DISCLOSURE PRACTICES

Before commencing with disclosure, it is important to refer to or undertake a scoping study (see separate CoST guidance note). Such a study should include an examination of the current and anticipated legal and regulatory requirements for disclosure, as well as the current practice of procuring entities in disclosing project and contract data and information, including what they disclose, when and how. Drawing on the findings and recommendations of such a scoping study will contribute significantly to the design of an effective disclosure process.

In cases where a CoST member secretariat finds it necessary to design and implement a disclosure process before completing the scoping study, it is strongly recommended to start by mapping existing data management processes and disclosure practices in the procuring entities that will be part of the first disclosure exercise. The objective here is to respond to the questions.

- How does the existing data management process work?
- What data points are generated?
- What data points are disclosed?
- How is data disclosed?
- When is the data disclosed and by whom?
- What if any is the legal basis to disclose data?

The answer to these questions will inform the design and implementation of the initial disclosure process. This includes identifying the best channels for data dissemination, ensuring quality and related approvals, interactions with stakeholders, the need for a formal disclosure mandate and the development of a guideline that will help build the capacity of participating procuring entities before scaling up the process.

COST EL SALVADOR: MAPPING EXERCISE

In 2018, the CoST El Salvador multi-stakeholder group decided to map all the disclosure data points required by national legislation for delivering public infrastructure projects. It was found that 79 data points were required to be proactively disclosed, providing a valuable point of reference during the preparation of assurance reports. The main legal mandates were the Access to Public Information Act and the Public Administration Procurement Act, with associated regulations. The mapping exercise informed the development of a disclosure policy formalised by the Institute for Access to Public Information in 2019, requiring all procuring entities to disclose data and information proactively through the Unique System for Public Infrastructure Projects, which was administered by the Institute and in the process of being established. CoST El Salvador helped identify some data points relevant for their context, such as the type and amount of guarantees associated with each of the contracts according to the nature of works and services to be provided.

A CoST El Salvador infrastructure project subject to the CoST approach.

A simple Excel-based tool is available upon request to help identify the current data management process and practices in disclosing project data and information. The standard list of items can be adapted to ensure alignment with: local systems, legal requirements, terminology and industry practices. It can also be amended to include other data points that stakeholders will find relevant or interesting. See **Annex 2** for further details.

2.2.2 IDENTIFYING DATA FORMATS AND PUBLIC CHANNELS FOR PROACTIVE DISCLOSURE

Data should be presented in a clear, consistent and usable format that lends itself to analysis. It is recommended that data is published in an open format such as Excel, comma-separated values or JavaScript Object Notation, and under an open licence. An open licence grants permission to access, re-use and redistribute a work – whether sound, text, image or multimedia – with few or no restrictions. An open data format and open licence allows anyone to access, share use and reuse the data (see **Chapter 3**).

Moreover, data should be disclosed through a public channel that is accessible to a wide range of stakeholders. There are various mechanisms for disclosure, including online platforms, print media, broadcast media and social media. Generally, one channel should be chosen as the primary mechanism with others added to serve the needs of specific stakeholders or in pursuit of specific objectives.

2.2.2.1 Online platforms

An easily accessible website, online database or other application allows for simple management and updating of the disclosed data from many procuring entities and projects. It can also facilitate the search for, selection, viewing and comparison of projects or data in different formats and languages. Moreover, it can help achieve effective interaction with the public in several ways. Not only can some data be presented in a manner that is more likely to be understood by a non-expert, but reactions to disclosure or requests for information and clarification can readily be submitted online. Procuring entities can also respond in this manner. The best suitable online platform will be determined by the structure of government, internet capacity and stakeholder needs. Options include the following.

MapaInversiones, the data platform used in the CoST Costa Rica programme.

- An existing or new central government web portal, such as those hosted by public procurement oversight authorities. This is likely in a more centralised structure of government.
- Procuring entities' official websites. This is more likely to occur where the procuring entity has a high degree of autonomy. Linking procuring entities to a central site provides a central point of access for stakeholders.
- A CoST national programme website. This may be considered as a short-term option while a government disclosure portal is developed, or when the government is ready to take over the website at a later date.

The preferred option will depend on the capacity of the individual procuring entity and of the broader public sector. Where procuring entities have electronic information management systems, adapting these systems to disclose data could be relatively straightforward and should make the process much easier.

Where procuring entities are reliant on paper-based systems, in the short term this data can be entered into a spreadsheet or comma-separated-values format while the information management and disclosure systems are developed.

Independently of the selected option, it is important that the procedures for compiling and disclosing data support the eventual transition and scaling up to a fully automatic or electronic data management and disclosure system.

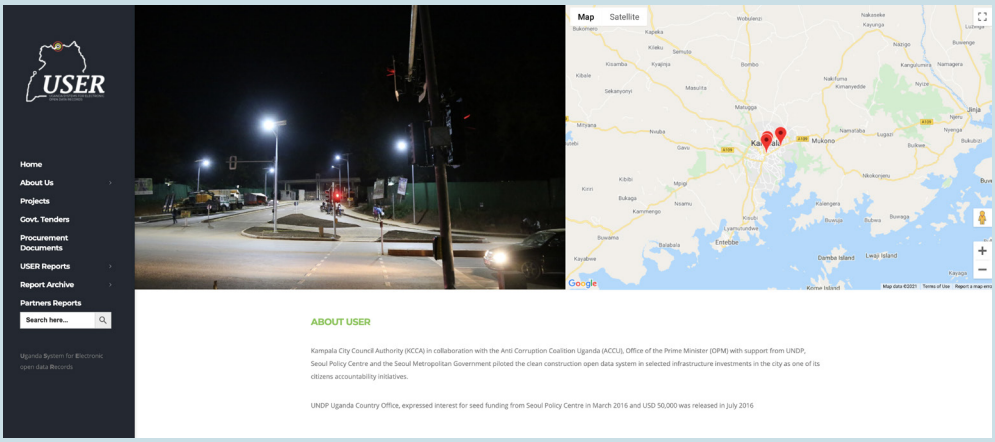
An Excel-based tool is available to help procuring entities in disclosing project data and information. The standard list of items can be adapted to align with local systems, legal requirements, terminology and industry practices. It can also be amended to include other data that stakeholders will find relevant. See **Annex 3** for further details.

2.2.2.2 Social media

Social media such as Twitter, Facebook and text messaging can be used to inform citizens that the information has been disclosed. In remote areas with poor internet access, text messaging has been a particularly effective tool for disseminating information to citizens.

COST UGANDA: USING DIFFERENT CHANNELS TO DISCLOSE DATA

The legal framework in Uganda – the Access to Information Law of 2005 and Regulations of 2011, the PPDA Act 2003 and the Constitution of Uganda 1995 as amended – provide for citizen access to information, using various online platforms such as official websites, the Government Procurement Portal, Electronic Government Procurement Portal (E-GP) and the National budget portal, as well as through traditional and social media handles.



CoST Uganda also promotes the use of physical channels, such as the information officers in every procuring entity and community meetings named barazas, as accountability platforms for public officials on service delivery. Procurement entities have also established other means of sharing information on public infrastructure projects, such as the Kampala Capital City Authority, which established an online platform called www.user.ug to disclose data in the CoST IDS format.

2.2.2.3 Print media

Print media may be preferred in areas where internet access is limited or unreliable, where printed publication is required for official documents and where it is a useful supplement to reach certain target audiences. The primary drawbacks to using printed media is the volume of data to be handled (such as when disclosure applies to many projects and entities) and the fact that the data requires frequent updating to be relevant and timely. When data is being summarised, care needs to be taken to ensure that relevant and meaningful elements are retained.

2.2.2.4 Offices

Where data is disseminated through print media, or in locations where internet connectivity is poor, it can be useful to have a portfolio of data sheets available as a basic hard-copy document. This can be provided for reference in a procuring entity office, public information centre or community centre, such as on a noticeboard. Some offices also could provide the public with electronic access to data stored on their local drives.

2.2.2.5 Events

Events have proved effective for dissemination in some situations, especially in the early stages of building demand for the disclosed information. Such events, or similar ones, may in some cases be officially required parts of the planning, preparation and implementation of infrastructure projects. Meetings may be used to release data on key occasions, or to enable active interaction with the media and civil society organisations in a constructive environment.

The events can be large forums aimed at maximising participation, or smaller targeted workshops or roadshows that allow for more detailed discussion. The latter may be targeted at a sector, or at a community level, to allow explanation and discussion of issues of local concern.

2.2.3 DEFINING RESPONSIBILITIES AND TIMING OF DISCLOSURE

The timing and frequency of disclosure should reflect the nature of the different sectors and the size and complexity of infrastructure projects. The options for the timing and frequency of disclosure include the following.

- Disclosure at project milestones. This may be preferred at the early stages of the project life cycle, as much data is collected once and is unlikely to change. Examples of project milestones may include:
  - end of the project identification phase, when budget and project approval has been received
  - completion of project design
  - end of the project preparation phase, prior to invitation to tender for the works contract
  - end of the tender management process, at contract award
  - contract completion (after defect liability period)
  - project completion.

Supplementary milestones may be required during project stages, especially on large complex projects when the overlapping processes for project identification, appraisal and preparation can be lengthy.

- Disclosure at regular fixed intervals, such as monthly or quarterly. This is particularly relevant during construction, when data points such as anticipated contract cost and anticipated contract completion date can vary several times and significantly during a long construction period. This option could also apply during the early stages of a long and complex project, where significant changes might occur during the course of each stage.

This step also includes defining who specifically within the procuring entity will be responsible for compiling and disclosing data. Ideally the public official in charge of day-to-day project management should be involved in the process. While retaining clarity over ultimate lines of responsibility for disclosure, the task may be distributed amongst different officials according

to the internal division of the procuring entity responsibilities. For example, the planning unit could disclose data during the project identification and preparation stages, while those responsible for tender management could do likewise until the contract award. The contract management unit could then integrate routine disclosure into their processes for contract implementation and completion.

2.2.4 QUALITY ASSURANCE AND APPROVALS

Procuring entities will normally need to establish an internal quality assurance process to ensure that the timing of disclosure and the accuracy and completeness of what is disclosed is consistently achieved, with clear lines of responsibility for quality management and related internal approvals. The requirements of this process, with realistic related timelines and contingencies, should be clearly specified in the internal procuring entity procedures.

2.2.5 INTERACTION WITH STAKEHOLDERS

To be effective, a disclosure process must provide an appropriate means for stakeholders to raise questions about the disclosed data. Provision of a formal mechanism for submitting stakeholders' questions and ensuring that they are received by the appropriate person in the procuring entity, will ensure that this process is transparent and fair. Questions are likely to fall into one of three categories:

- request for additional information (reactive disclosure)
- request for specific clarification or explanation of particular issues
- complaint and request for action on an issue requiring remedy.

It is recognised that some aspects of the applicable procedures for reacting to disclosed information is likely to be defined to some extent in existing procedures or regulations. These may include those related to freedom-of-information provisions, though the mechanism for submitting questions may differ for each of the above categories.

In some cases, for instance, requests for additional information can be submitted by any eligible person either through a specific electronic system, by regular mail, or at the project owners and procuring entities' offices. Reactive disclosure or response from the procuring entity usually entails making the additional information available to the requesting party in a usable form, in an accessible place and under a specified set of conditions. This is what in CoST is called reactive disclosure (**Figure 2.4**).

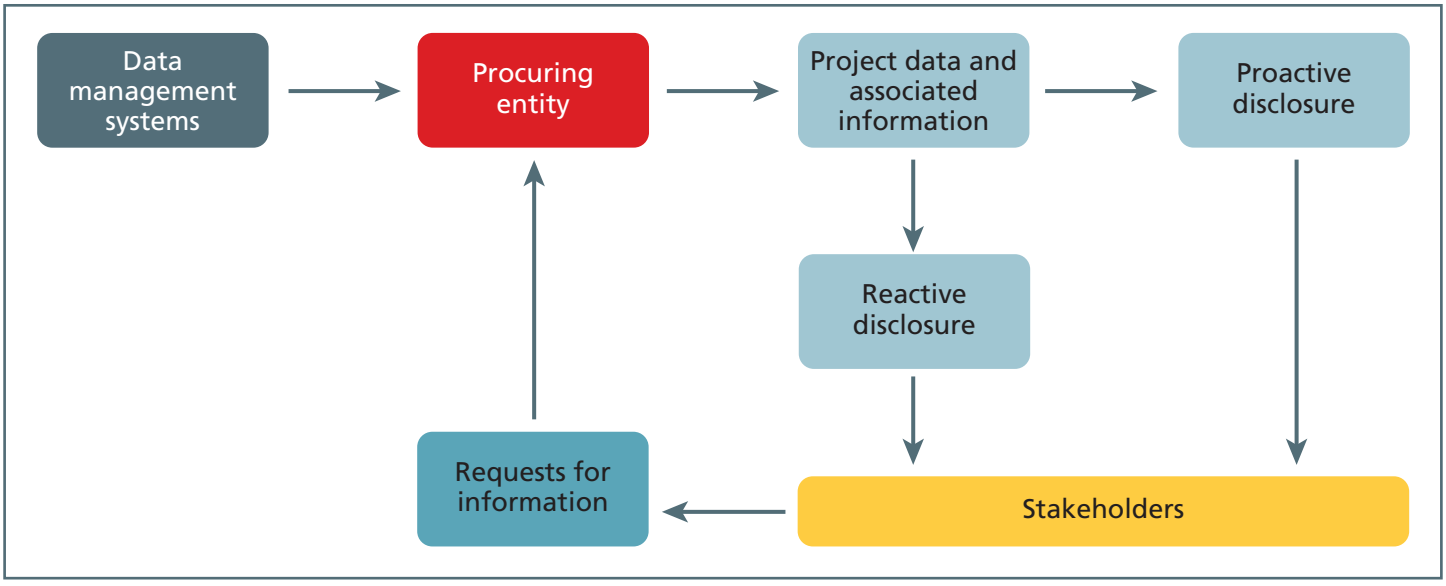


Figure 2.4 Typical data flows in CoST

Specific requests for explanation or clarification may need to be handled under another mechanism, so the procuring entity should establish protocols for appropriate and timely handling of such requests. Both the submitted request and response should be handled transparently, for example by being displayed on the relevant part of the website used for information disclosure. The extent to which a procuring entity makes the content of all requests and responses visible to the public is a matter of choice. Some may prefer to develop and update a series of frequently asked questions.

Particular requests for action (for example on a safety concern) or complaints may need to be handled under separate protocols and via mechanisms appropriate for that purpose.

2.2.6. MANDATING DISCLOSURE

A disclosure mandate is the administrative or legal basis that obliges procuring entities to publish project and contract data and information in line with the CoST IDS or OC4IDS. This mandate is important because it gives the public officials a clear authority and duty to collect, compile and disseminate data to the general public within legal boundaries.

A mandate may be needed to support and help shape a disclosure process that aligns with and complements the country's existing institutional functions, policies and laws relating to access to information, procurement and public financial management. A CoST member secretariat can support a multi-stakeholder group in drafting a compelling disclosure mandate. This may include consultation with private sector and civil society organisations as part of the process of generating awareness of and support for the approach being proposed to the relevant authorities.

Establishing a long-lasting and enforced mandate to disclose data, such as a national procurement law or regulations, takes time, so an interim mandate should be adopted in the early stages of a CoST national programme. This is likely to be based on a ministerial directive or government policy that provides sufficient authorisation for specific procuring entities to disclose project and contract data and information for a limited period of time.

The interim mandate should be in force before procuring entities begin disclosure, and should continue until a permanent mandate is established. The permanent mandate would be developed once the government has an adequate basis to do so. It should ideally apply to all public infrastructure and continue to be enforced after the CoST national programme ends.

See **Annex 4** for examples of disclosure mandates.

GUATEMALA'S DISCLOSURE MANDATES

The Guatemalan Government introduced a mandate in December 2013 when it enforced the disclosure to the CoST IDS as part of the Regulations of the Organic Law of the National Budget. Since then over 6000 projects have been disclosed using the CoST IDS on the government's e-procurement portal, Guatecompras. To assist the procuring entities, the Guatemala multi-stakeholder group published a manual that provides guidance on the timing of disclosure and the format of the CoST IDS. The group also provided training on the regulations to over 300 procuring entities. However, as the regulations had to be renewed on an annual basis, the disclosure mandate was enhanced when the disclosure of CoST IDS was included in the State Procurement Law in October 2016 and the procurement regulations issued by the Ministry of Finance in 2019.

After a disclosure mandate is issued, it is appropriate to establish a disclosure guideline on how to use the selected public channel for proactive disclosure. This would define a list of data points that should be disclosed, together with details of: formats, timing, frequency, responsible parties and related quality assurance and controls. This policy should include information that can be released in response to a request for additional information. It is likely to be governed by a country's legislation on freedom of information.

Most disclosure regimes exclude information of a temporary nature. Examples include internal correspondence and draft versions of documents or papers related to ongoing claims that are in the process of being considered through agreed processes, but have not yet been resolved. Also usually excluded is commercially sensitive information that could compromise market competitiveness, including some elements of bid documents and related evaluations.

The disclosure guideline should also establish a process that records and classifies all requests for information, reactions from stakeholders and responses provided by the procuring entity or other authorities. This will enable regular publication of a monitoring report by the procuring entity that summarises interactions.

See **Annex 5** for a template for disclosure guidelines.

2.2.7. BUILDING PROCURING ENTITY CAPACITY TO DISCLOSE

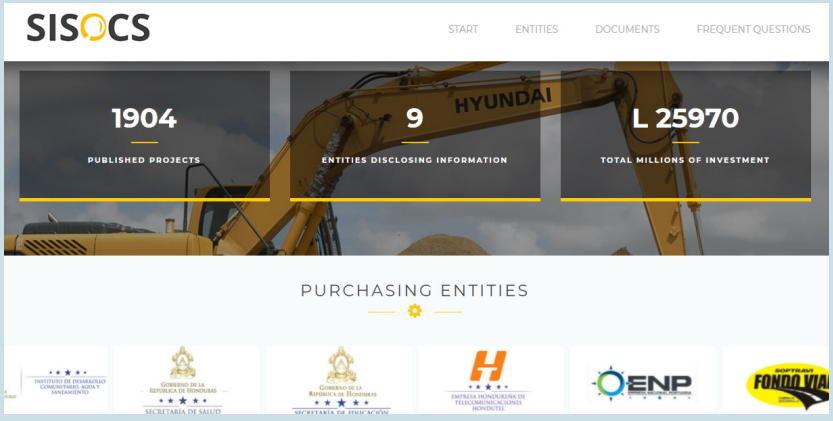
It should not be assumed that participating procuring entities will necessarily start disclosing proactively once a disclosure mandate has been established or a disclosure policy has been issued.

Building the awareness and capacity of procuring entities to meet the new legal requirements is thus critical if transparency in public infrastructure is to be realised.

This can be achieved by the CoST member secretariat working with the government to develop a capacity-building programme that raises awareness about the disclosure mandate and uses the disclosure policy to help train officials on the practical details of disclosing data from their infrastructure projects.

COST HONDURAS: INNOVATIVE DISCLOSURE PORTAL SCALE-UP

CoST Honduras has worked with the Government to develop an innovative web-based disclosure portal that draws together disaggregated data into a single location that the public can access. In the first six years following establishment in 2014 of the Information and Monitoring System of Public Works and Supervision Contracts (SISOCS), over 2000 projects with a total value exceeding USD 1 billion were disclosed on the system. A new version of the portal was then developed to disclose data using the OC4IDS. A disclosure mandate was established in January 2015 by a Presidential Executive Decree that mandated proactive disclosure of all CoST IDS data points, including the list of information for reactive disclosure. During its first year, SISOCS started disclosing data on 13 projects from the transport sector funded by external funds. These projects were managed by two procuring entities. In the second year, it increased disclosure to over 300 projects, focusing in the same sector but extending its scope to include other procuring entities and projects funded under the national budget. By 2016, SISOCS was being used by five procuring entities that belonged to the Economic Infrastructure Cabinet and included further sectors, such as energy and telecommunications. Finally, SISOCS was extended to all procuring entities in the Central Government managing both economic and social infrastructure projects.



2.2.8 SCALING UP DISCLOSURE

Building on the scoping study findings, disclosure process experience and content of the disclosure mandate, the multi-stakeholder group and CoST member secretariat can support the relevant government entities in identifying the path for scaling up the initial disclosure process to its eventual broader institutionalisation.

Scaling up the disclosure process will be necessary when procuring entities are publishing significant volume of data across numerous projects and when there is a need for periodic changes to data over time. Another driver to scaling up disclosure may be the need for open data that can be easily accessed, sorted and analysed, looking forward to the institutionalisation of the process over time.

An open-source code is available in the CoST GitHub Repository.

2.3 Public–private partnerships and the CoST IDS

The PPP Knowledge Lab defines a public–private partnerships (PPP) as, "a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility and remuneration is linked to performance". Development and implementation of a PPP process includes different stages as follows:

- project identification and screening
- project appraisal and structuring
- drafting a PPP contract
- management of PPP transactions
- management of PPP contracts.

As set out in **Figure 2.5**, the project life cycle of a PPP differs from those categorised as "public procurement projects" or "traditionally procured projects", for which the CoST IDS was developed.

To ensure its relevance to PPPs, CoST collaborated with the World Bank Group and the Public-Private Infrastructure Advisory Facility (PPIAF) in developing A Framework for Disclosure in PPP. This joint product includes all relevant data points from the CoST IDS and other key elements applicable specifically for PPPs, and can be useful for promoting transparency and accountability in this type of project.

CoST member secretariats should work in partnership with the World Bank Group to undertake a disclosure diagnostic report in PPPs before customising this framework in a specific jurisdiction (**see box**).

An open-source code is available in the CoST GitHub Repository.

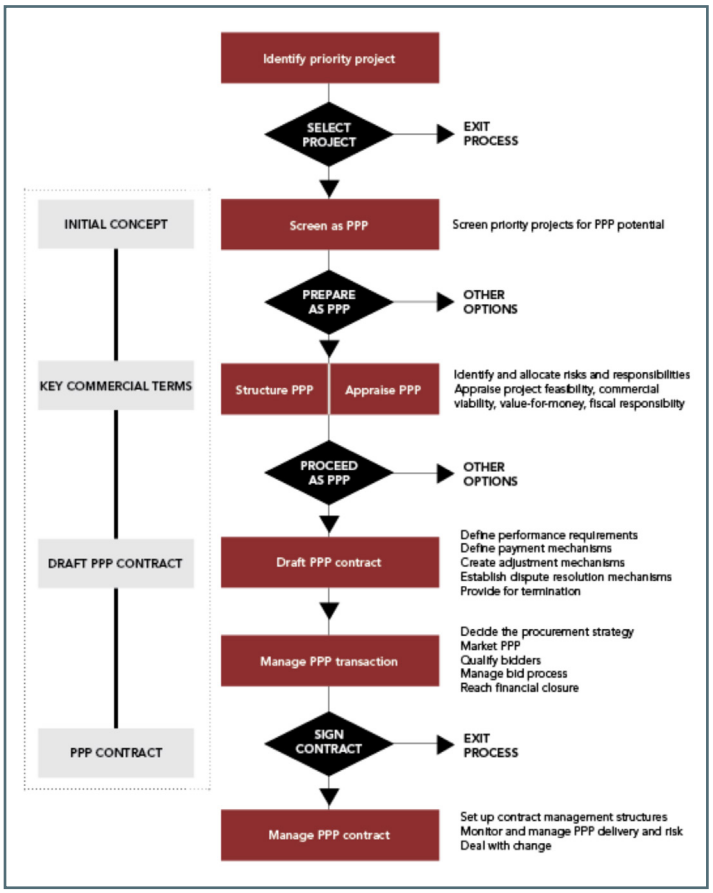


Figure 2.5 Overview of a PPP cycle

COST HONDURAS: THE FIRST MEMBER DISCLOSING PPP DATA

In 2015 Honduras became the first CoST member to disclose PPP data as part of its agreed transparency programme. In 2016, CoST Honduras recommended the creation of a specific disclosure portal for PPPs in its third assurance report, where the CoST IDS was tested. This highlighted the need to expand disclosure to relevant financial data, risk allocation, PPP screening and transaction management. In 2017 the national secretariat collaborated with the World Bank Group and the Government of Honduras to develop a Diagnostic Disclosure Report for PPPs and supported the design of an innovative web-based disclosure portal called SISOCS PPP dedicated to PPP projects. In 2019 the secretariat dedicated its sixth assurance process to PPP projects, identifying the need for improving access to open data published in the SISOCS PPP. In 2020 CoST Honduras supported the Government in improving the portal, which has now become the OCDS PPP extension.

2.4 How disclosure relates to other CoST features and functions

2.4.1 DISCLOSURE AND OTHER COST FEATURES

In addition to disclosure, the other CoST features are assurance, multi-stakeholder working and social accountability.

- **Assurance**: proactive disclosure is an essential pre-requisite for assurance to be possible. Assurance then includes a review of disclosure that:
  - evaluates the degree to which proactive disclosure has taken place
  - requests data and documents subject to reactive disclosure
  - assesses the accuracy or otherwise of what has been disclosed
  - drawing on the totality of available data to identify and highlight issues of interest or concern.
- **Multi-stakeholder working**: this supports the design and implementation of disclosure processes by getting the scoping study, the CoST Infrastructure Transparency Index (ITI) results and assurance report findings endorsed by a multi-stakeholder process. This endorsement facilitates working with relevant procuring entities to achieve meaningful progress in terms of transparency and accountability.
- **Social accountability**: it is expected that stakeholders, including citizens' groups and the media, request and use disclosed data as well as the infrastructure analytical dashboards, the CoST ITI results and assurance reports. The information provided through disclosure routine analysis, periodic evaluations and related assurance may then be used by others within government with responsibility for official accountability mechanisms.

2.4.2 DISCLOSURE AND OTHER COST FUNCTIONS

Over time, the increasing set of disclosed data, related assurance reports, the CoST ITI results and additional analysis carried out by others constitutes a growing resource. It will be of increasing value, not just at the level of a single procuring entity but across a sector, a region and even internationally. This also contributes to the progressive establishment of a body of knowledge that facilitates CoST's own internal monitoring, evaluation, accountability and learning functions. Important considerations in this regard include reporting on:

- number of projects disclosed monthly
- value of projects disclosed monthly
- number and scope of any disclosure mandates
- number of visits to on-line disclosure portals.

3. The Open Contracting for Infrastructure Data Standard

3.1 The Open Contracting for Infrastructure Data Standard as part of the disclosure journey

CoST, the Open Contracting Partnership (OCP) and the Open Data Services (ODS) developed the Open Contracting for Infrastructure Data Standard (OC4IDS) in partnership with experts from the three organisations.

It is an open data standard for joined-up data about infrastructure projects and their contracts. The OC4IDS leverages the CoST Infrastructure Data Standard (CoST IDS) and the Open Contracting Data Standard (OCDS). It combines CoST's work on what to disclose about infrastructure projects and contracts with OCP's work on what to disclose about associated contracting processes, while specifying how to structure and format the data in a useful way.

The OC4IDS is designed to make it easier to publish and use infrastructure data. This can in turn facilitate improved monitoring and scrutiny of infrastructure projects through the CoST assurance and social accountability processes, or by using real-time analysis, for example through infrastructure analytical dashboards as described in Chapter 4.

For CoST members with experience of the first step in the disclosure journey, progressing to this next step means continuing to disclosing the same CoST IDS data points, while ensuring that the structure and formats required by the OC4IDS are followed.

3.2 The OC4IDS as an open data standard

A data standard describes both the structure of the data and what each item within the data means. An open data standard builds on that, by being freely available for anyone to use for a range of purposes.

As an open data standard, the OC4IDS is freely available in a mini-website developed by OCP and CoST, where the structure of data and its meaning is described in detail. The content of this chapter is based on that and is intended as an additional resource for CoST members or other interested parties seeking to understand how to navigate the dedicated website.

The OC4IDS toolkit can be explored in conjunction with the content of this chapter as a complementary resource to facilitate understanding by those who are not experts in open data.

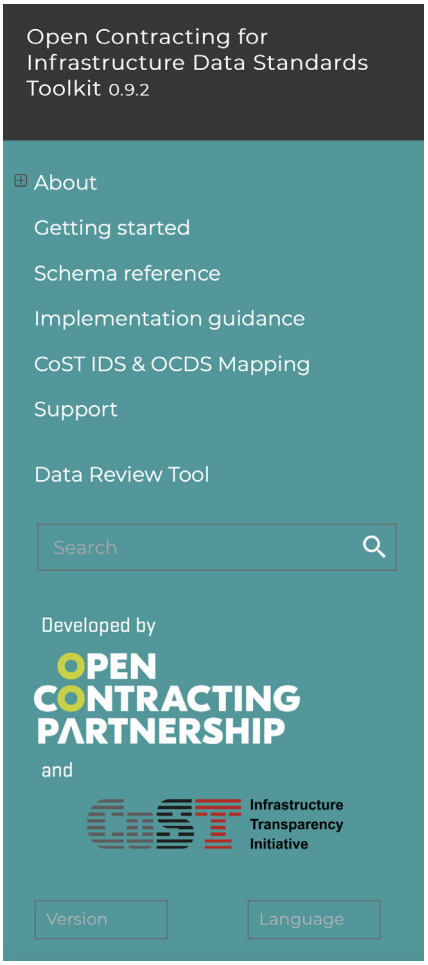


Figure 3.1 OC4IDS website index

3.3 Exploring the OC4IDS toolkit

When procuring entities have decided to implement the OC4IDS, CoST member secretariats can support the process in different ways. This support can include: explaining the basics of the OC4IDS to public officials and stakeholders, providing guidance in appointing a team of developers, building relationships with donors, and even managing a contract for information technology services. In any event it is strongly recommended that CoST secretariats are familiar with the website and its content (**Figure 7**).

3.3.1 GETTING STARTED

The website sections About and Getting started are very simple and easy to explore. Basically, both sections provide the background, key concepts, definitions and recommendations for the different options to implement the OC4IDS.

One important issue to be considered is that though the content of the website is in English by default, a Spanish version is also available. Before starting, users can switch to their preferred language by clicking the button "Language" in the lower right part of the index and selecting their choice.

3.3.2 DATA FORMATS

When using the website it is important to understand that the Schema reference refers to at least three formats in which data can be published, as follows.

- Free text or string: this refers to a specific number of characters (letters, numbers, symbols, spaces) that the user enters freely, respecting the recommendations of limits to a sentence or paragraph. In the OC4IDS a limited number of data points use this format including: project reference number, project name, project description, project scope, reasons for project and contract changes and scope at completion.

- Building blocks or objects: these are basically similar fields for some data points that take the form of a template. There are at least eight types of objects, including: organisations (project owners, procuring entities, contract administration entity and firms or companies), organisation reference, project location, funding sources with budget breakdown, contact details, values (e.g. budgets and costs), periods (e.g. contract duration and project completion date) and documents (e.g. project brief or feasibility study, tender documents, contract agreement, and financial and audit report).

- Code lists: these constitute options from a list, with the aim of limiting and standardising the possible values of the fields and promoting data interoperability. Code lists can either be open or closed. Closed code lists are intended to be comprehensive and therefore should not be modified unless an issue is registered in the OC4IDS GitHub Repository (e.g. project status, contract status and contract type). Open code lists are intended to be representative but not comprehensive (e.g. sector and subsector, and variations to contracts). Open lists can be modified or adjusted if necessary.

Users should also consider that some data could be generated automatically by an information system. Examples could include the project unique identifier, the initial date of publication and the date of the last update.

Using the stages of the project life cycle as a guide, **Table 3.1** summarises the CoST IDS data points and their format in the OC4IDS.

COST IDS DATA POINT	OC4IDS FORMAT	REMARKS
PROJECT IDENTIFICATION		
1. Project reference number	**Free text with a prefix**	**ProjectIdentifiers**
2. Project owner	**Object**	**Organization**
3. Sector, subsector	**Code list**	**ProjectSector**
4. Project name	**Free text**	**One sentence**
5. Project location	**Object**	**Location**
6. Purpose	**Free text or object**	**ProjectType**
7. Project description	**Free text**	**One paragraph**
PROJECT PREPARATION		
8. Project scope (main output)	**Free text**	**One paragraph**
9. Environmental impact	**Free text or object**	**Document**
10. Land and settlement impact	**Free text or object**	**Document**
11. Contact details	**Object**	**ContactPoint**

12. Funding sources	**Object**	**BudgetBreakdown**
13. Project budget	**Object**	**Value**
14. Project budget approval date	**Free text**	**Calendar**
TENDER MANAGEMENT		
15. Procuring entity	**Object**	**OrganizationReference**
16. Procuring entity contact details	**Object**	**ContactPoint**
17. Procurement process	**Free text or list**	**List of recognized options**
18. Number of firms tendering	**Free text or object**	**OrganizationReference**
19. Cost estimate	**Object**	**Value**
20. Contract type	**Code list**	**contractNature**
21. Contract title	**Free text**	**One sentence**
22. Contract firm	**Object**	**Organization**
23. Contract administration entity	**Object**	**OrganizationReference**
24. Contract price	**Object**	**Value**
25. Contract scope of work	**Free text**	**One paragraph**
26. Contract start date	**Free text**	**Calendar**
27. Contract duration	**Object**	**Period**
28. Contract status	**Code list**	**ContractingProcessStatus**
CONTRACT IMPLEMENTATION		
29. Variation to contract price	**Object**	**Modification**
30. Escalation to contract price	**Free text or object**	**Value**
31. Variation to contract duration	**Object**	**Modification**
32. Variation to contract scope	**Object**	**Modification**
33. Reasons for price changes	**Free text**	**One paragraph**
34. Reasons for scope and duration changes	**Free text**	**One paragraph**
PROJECT COMPLETION		
35. Project status	**Code list**	**ProjectStatus**
36. Completion cost	**Object**	**Value**
37. Completion date	**Free text**	**Calendar**
38. Scope at completion	**Free text**	**One paragraph**
39. Reasons for project changes	**Free text**	**One paragraph**
40. Reference to audits and evaluation reports	**Free text or object**	**Document**

Table 3.1 Formats to disclose data proactively using the OC4IDS

Users should be aware that some of the language used in the OC4IDS website differs from what is used in CoST documents. For instance, contract type is labelled as "contract nature", and variations are "modifications". In any case, the definitions and examples provided in **Chapter 2** of this manual are consistent with definitions on the OC4IDS website.

In some jurisdictions, due to established practice, applicable regulations, legal frameworks or policies, procuring entities may choose to publish more data points that the 40 recommended for proactive disclosure in the CoST IDS. For such procuring entities, **Table 3.2** provides a summary of the elements contained in the CoST IDS recommended for reactive disclosure, highlighting the applicable format from the OC4IDS.

COST IDS DATA POINT	OC4IDS FORMAT	REMARKS
PROJECT IDENTIFICATION		
1. Project officials and roles	**Object**	**ContactPoint**
2. Project brief or feasibility study	**Object**	**Document**
PROJECT PREPARATION		
3. Multi-year programme and budget	**Object**	**Document**
4. Environmental and social impact assessment	**Object**	**Document**
5. Resettlement and compensation plan	**Object**	**Document**
6. Financial agreement	**Object**	**Document**
7. Procurement plan	**Object**	**Document**
8. Project approval decision	**Object**	**Document**
TENDER MANAGEMENT		
9. Procurement method	**Code list**	**method**
10. Tender documents	**Object**	**Document**
11. Tender evaluation results	**Object**	**Document**
12. Contract officials and roles	**Object**	**ContactPoint**
13. Contract agreement and conditions	**Object**	**Document**
14. Registration and ownership of firms	**Object**	**Document**
15. Specifications and drawings	**Object**	**Document**
16. Project design report	**Object**	**Document**
CONTRACT IMPLEMENTATION		
17. List of variations, changes, amendments	**Object**	**Document**
18. List of escalation approvals	**Object**	**Document**
19. Quality assurance reports	**Object**	**Document**
20. Disbursement records or payment certificates	**Object**	**Document**
21. Contract amendments	**Object**	**Document**
PROJECT COMPLETION		
22. Implementation progress reports	**Object**	**Document**
23. Budget amendment decision	**Object**	**Document**
24. Project completion report	**Object**	**Document**
25. Project evaluation report	**Object**	**Document**
26. Technical audit reports	**Object**	**Document**
27. Financial audit reports	**Object**	**Document**

Table 3.2 Recommended format in the OC4IDS for reactive disclosure elements

The OC4IDS provides further options for other elements that can be disclosed. Those include expected asset lifetime (period), open contracting identifiers, extended list of document type, related projects and role of relevant parties.

It should also be noted that elements considered crucial for specific stakeholders in particular jurisdictions can be included. Examples include the environmental category of an infrastructure project (via other classification), environmental licence (document), proportion of women working on the construction site (free text) and compliance with inclusive facilities regulations.

3.3.3 ADDITIONAL GUIDANCE

The Implementation guidance section provides detailed and useful advice, including on: how to define unique project identifiers, how to follow a step by step process for publishing data from an infrastructure project, how to use data from procurement systems, how to ensure compliance with the OC4IDS and how to develop publication policies. This section is interrelated with the following one, CoST IDS and OCDS Mapping, where both approaches are referenced.

Finally, the Support section and the Data Review Tool include advice on how to contact the OC4IDS helpdesk, which offers support services free of charge, and how to use a self-service verification tool. This provides basic internal data checks, presents a report on data quality and provides information about the contents of the uploaded file.

For a CoST member secretariat supporting a government in the implementation of the OC4IDS, it is important to understand that the helpdesk offers support in several important areas including in identifying suitable approaches and then making good use of existing tools. The helpdesk can also provide guidance on mapping, give feedback on draft data files and support the data validation process. CoST member secretariats should draw on this support and also take account of the following advice.

- Ask the CoST International Secretariat for advice when drafting terms of reference to appoint information technology specialists or developers.
- Include the development of an application programming interface that will allow eventual interoperability of the disclosure platform with other systems.
- Discuss and understand the objectives of key deliverables and an adequate schedule to ensure optimum contract management.
- Request or develop early-stage training for the developers so they can understand the project life cycle, procurement processes and existing disclosure platforms in the respective jurisdiction.
- Provide clear guidelines and feedback to the developers during contract implementation and follow up communications with the OC4IDS helpdesk.
- Near completion of the back-end, consider appointing website designers to work on the front-end side of the disclosure platform.
- Invite experienced colleagues and the CoST International Secretariat to provide inputs to the final deliverable before going online.
- Ensure individual projects and bulk data downloads are available in other formats besides JavaScript Object Notation[1], such as Excel or comma-separated values.
- Include web analytics tools to help understand the interest and behaviour of disclosure platform users.

See **Annex 6** for example of terms of reference to appoint information technology developers.

[1] JSON stands for JavaScript Object Notation. It is a lightweight format for storing and transporting data often used when data is sent from a server to a web page.

COST UKRAINE AND COST HONDURAS EXPERIENCE

In 2018 CoST Honduras and CoST Ukraine volunteered to pilot the implementation of the OC4IDS in their respective disclosure portals. After two years of implementation, some lessons learnt have been shared by both programmes. These include the following.

- Before starting implementation of the OC4IDS, review the scope and limitations of support that the OC4IDS helpdesk can provide.
- A good starting point for all stakeholders involved in the process is a capacity-building programme aimed at understanding the OC4IDS from users' perspectives.
- When communicating how to implement the OC4IDS, it is necessary to do so in different ways with different stakeholders, particularly for non-information-technology specialists.
- In the early stages of an OC4IDS project, it is helpful to promote more peer support and knowledge-sharing among CoST member secretariats. Over time, this can help to achieve a process that is more effective and efficient than may have been possible though a more-narrow approach.

A capacity-building programme will increase understanding of the OC4IDS across all stakeholders involved in the process.

3.4 Benefits on advancing in the disclosure journey.

The main benefit of advancing in the disclosure journey by implementing the OC4IDS is the access to more structured technical data. This can then be, "freely used, re-used and redistributed by anyone – subject only, at most, to the requirement to attribute and share alike". This the definition of open data in the Open Data Handbook.

Such access to open data can facilitate the CoST assurance process by providing bulk data for an initial sector analysis or procuring entity trends. Also, open data can support the CoST social accountability processes by providing access to re-usable project-level data that serves to enhance the accountability of the decision makers.

Finally, access to structured open data can facilitate movement towards the third step in the CoST disclosure journey. By allowing interoperability or intermixing, different datasets from different sources can be displayed in infrastructure analytical dashboards, as described in the next chapter.

4. Infrastructure analytical dashboards

4.1 Introduction

Infrastructure analytical dashboards (IADs) are business intelligence tools. They provide opportunities for effective data management and the subsequent development of powerful visualisations that enable users to interact with data, drill into it and reveal information that is easy to understand. For CoST programmes with access to open data, IADs provide a good mechanism for gaining insight into a specific infrastructure sector and its various procuring entities and projects.

An IAD can draw on a vast amount of data generated by different sources. This can then be used by a CoST member secretariat to provide support to the multi-stakeholder group, procuring entities and other stakeholders by presenting a comprehensive overview of information. This in turn will help to inform decision-making processes aimed at improving performance at the level of a project, a procuring entity or a sector.

For example, CoST Honduras draws on different sources of data to populate its InfraS IAD using available data from its infrastructure disclosure platform SISOCS and other governmental systems, such as open data portals. CoST Ukraine is using relevant data available in the national procurement platform, Prozorro, and the CoST Ukraine portal to develop its Transparent Infrastructure IAD. These two examples are illustrated in **Figure 4.1**.

Independently of the data sources available in each jurisdiction, the central idea of IADs is to help CoST member secretariats and other stakeholders to identify problems to be solved and other potentially significant trends to be identified and better understood. With the added ability to filter data according to multiple variables and to create visualisations, IADs can help to improve performance in the public infrastructure sector, based on the interest and engagement of all stakeholders including: the private sector, civil society, media and the general public.

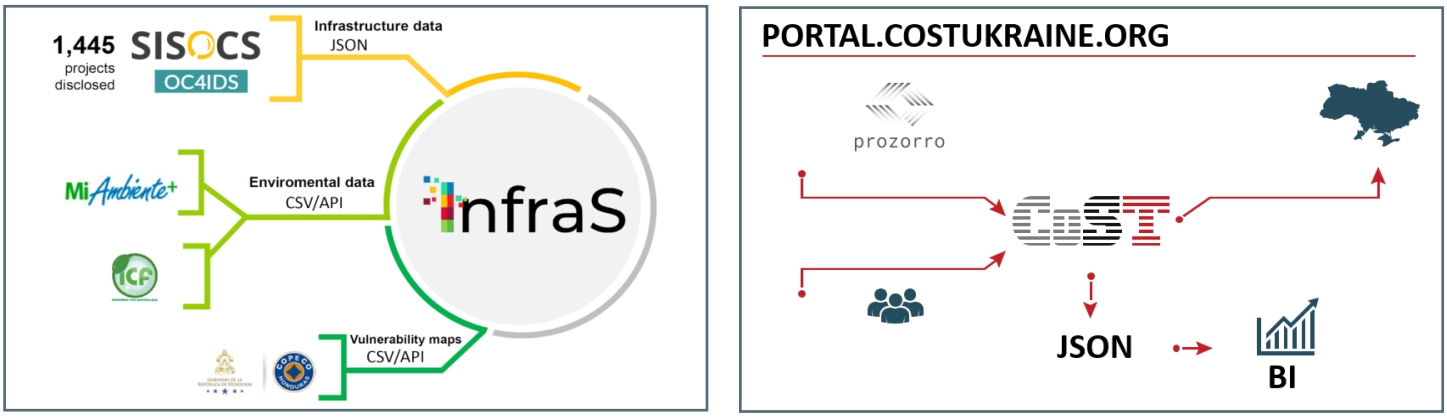


Figure 4.1 InfraS and Transparent Infrastructure IADs data sources schemas

4.2 Problem-solving dashboards

The ultimate purpose of an IAD is to drive action. Although there may be a healthy approach to data disclosure, it is only by communicating the right data to the right people that the intended purpose will be achieved.

More broadly, IADs can bring lasting and cost-effective results to the CoST national programmes through the contribution they can make to the assurance process and social accountability actions.

Before embarking upon a dashboard development process, it is important to be clear about the purpose, expressed in terms of the specific problems that the IAD is intended to address. An example of this is set out in **Figure 4.2**, in relation to a problem identified by the CoST Honduras secretariat during its participation in the Presidential Hackathon in Taiwan. The focus in this case on was how to use OC4IDS data to promote sustainable infrastructure.

Based on insights of historical data in its infrastructure disclosure portal SISCOCs, CoST Honduras developed its InfraS dashboard to analyse different indicators in each of the sustainable infrastructure areas. The aim was to understand opportunities to support achieving the United Nations sustainable development goals in the country (**Figure 4.3**).

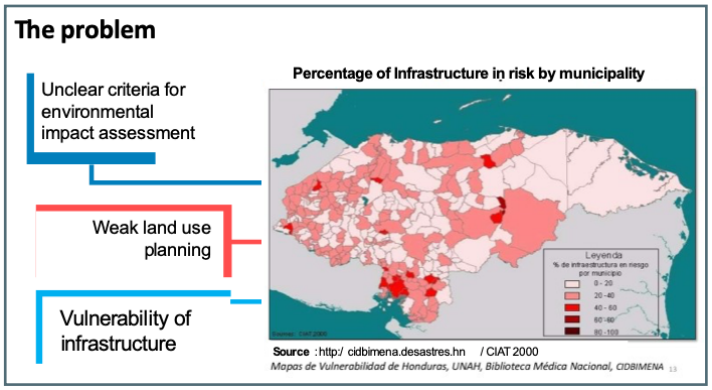


Figure 4.2 Understanding infrastructure-related problems in Honduras

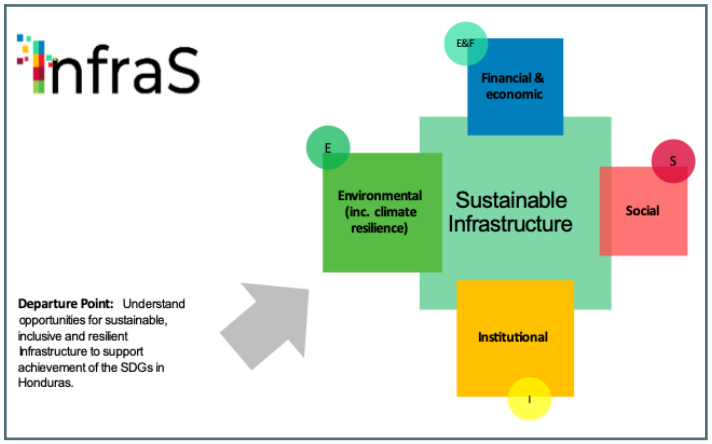


Figure 4.3 InfraS is a comprehensive IAD for sustainable infrastructure

4.3 Areas of likely interest

To identify areas of interest on the part of different stakeholders – including government, private sector, civil society, media and citizens – a CoST member secretariat should develop "use cases" for an IAD. This involves capturing user points of view and potential actor–system interactions, describing all the ways an end-user may want to use a dashboard.

For instance, based on use cases, CoST Ukraine decided to focus the initial analysis on the road subsector. The secretariat selected four areas of high public interest: market, suppliers, project costs and procurement processes. The menu page of this tool is illustrated in **Figure 4.4**.

See **Annex 7** for a description of a guide to develop use cases, which is available upon request.

IADs are useful when complex categorised information is massive and broad. As in the example above, an IAD usually consists of different modules according to the areas of likely interest. It may include financial, social and economic aspects, as well as procurement analytics and other key performance indicators.

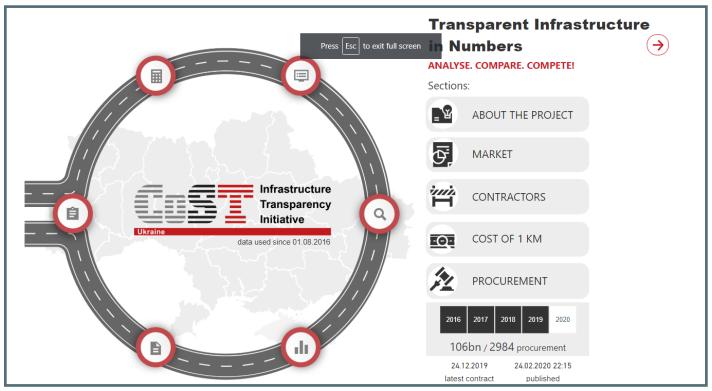


Figure 4.4 Transparent Infrastructure dashboard areas of interest for the road sector

4.3.1 FINANCIAL DASHBOARDS

The analysis presented in financial dashboards can help decision makers to see, for instance, how the budget to finance public infrastructure is being allocated. This can lead to improved budget allocation processes.

Using key data points, such as: location (region), additional classifications (type of roads), project type (type of works), project period and final value, CoST Ukraine developed a set of graphics and tables to show how the market is structured in the road sector (**Figure 4.5**).

Based on the use cases, the dashboard helps private companies to have a clear picture of the distribution of the roadworks market in different regions, together with further details related to: market players, types of works undertaken, contract values and per-kilometre rates.

The same dashboard also allows procuring entities to see the number of signed contracts, indicating the ratio of repairs on local and state roads in the selected year. This enables them to then adjust plans for specific operational activities in an informed and rational manner.

Another dashboard example focuses on private companies, providing a visual analysis of contractors and the number of contracts awarded to them.

Using key data points, such as: location (region), contract price, contract firm, project type (type of works) and project period, CoST Ukraine developed a set of charts to show an overview of top five contractors in each region in the road sector (**Figure 4.6**).

This comprehensive IAD enables private sector companies to identify trends and support their bidding strategies, adding to both the quality and extent of underlying competitive processes.

Furthermore, the same dashboard reveals to procuring entities the top five suppliers where their budget is allocated and informs optimisation of monitoring processes.

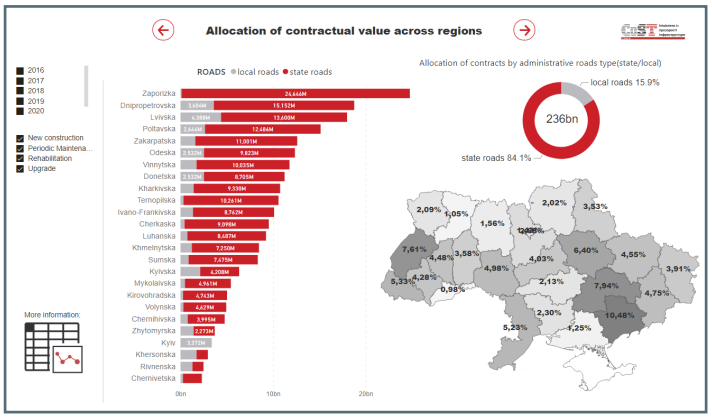


Figure 4.5 Analytical dashboard example based on financial aspects (market)

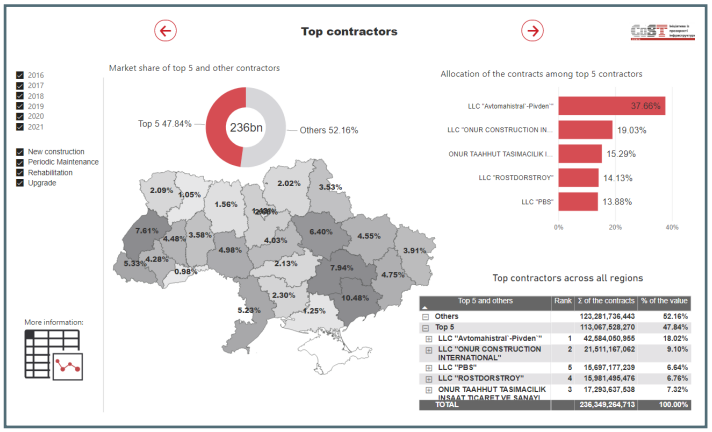


Figure 4.6 Analytical dashboard example based on financial aspects (top contractors)

4.3.2 ANALYTICAL KEY PERFORMANCE INDICATOR DASHBOARDS

IADs can provide crucial metrics such as number of kilometres of works per road category, the total volume of investments per type of works and the number of contracts signed per fiscal year. They can also provide high-level data on average costs per kilometre by type of intervention and road category.

Using key data points, such as: total project value, project scope, additional classifications (type of road), project type (nature of works) and project period, CoST Ukraine was able to develop a set of charts to show key performance indicators in the road sector (**Figure 4.7**).

This dashboard helps procuring entities to keep track of the costs per type of works and regions. They can use the IAD to help them to make decisions that are informed by the best available data. Additionally, this can help the private sector to prepare competitive bids.

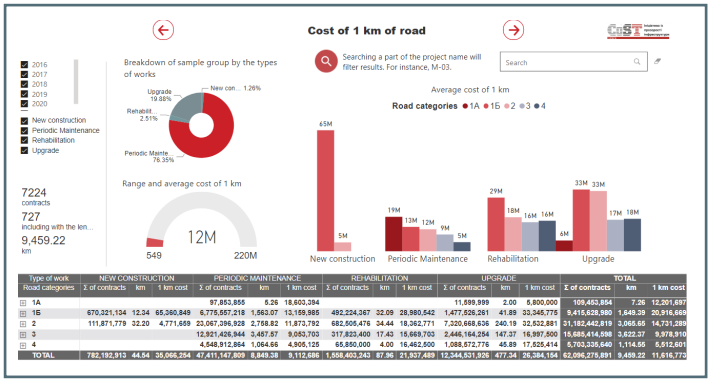


Figure 4.7 Analytical key performance indicator dashboard example based on investment costs

4.3.3 PROCUREMENT DASHBOARDS

IADs can also track key performance indicators related to the tender management and contract implementation stages of procurement. These stages generate large volumes of data and can allow different types of analysis for different stakeholders.

For instance, CoST Ukraine selected a few data points related to: the procurement method, the number of firms tendering, the contract price, the type of works, the contract start date and the number of procurement process in the road sector (**Figure 4.8**).

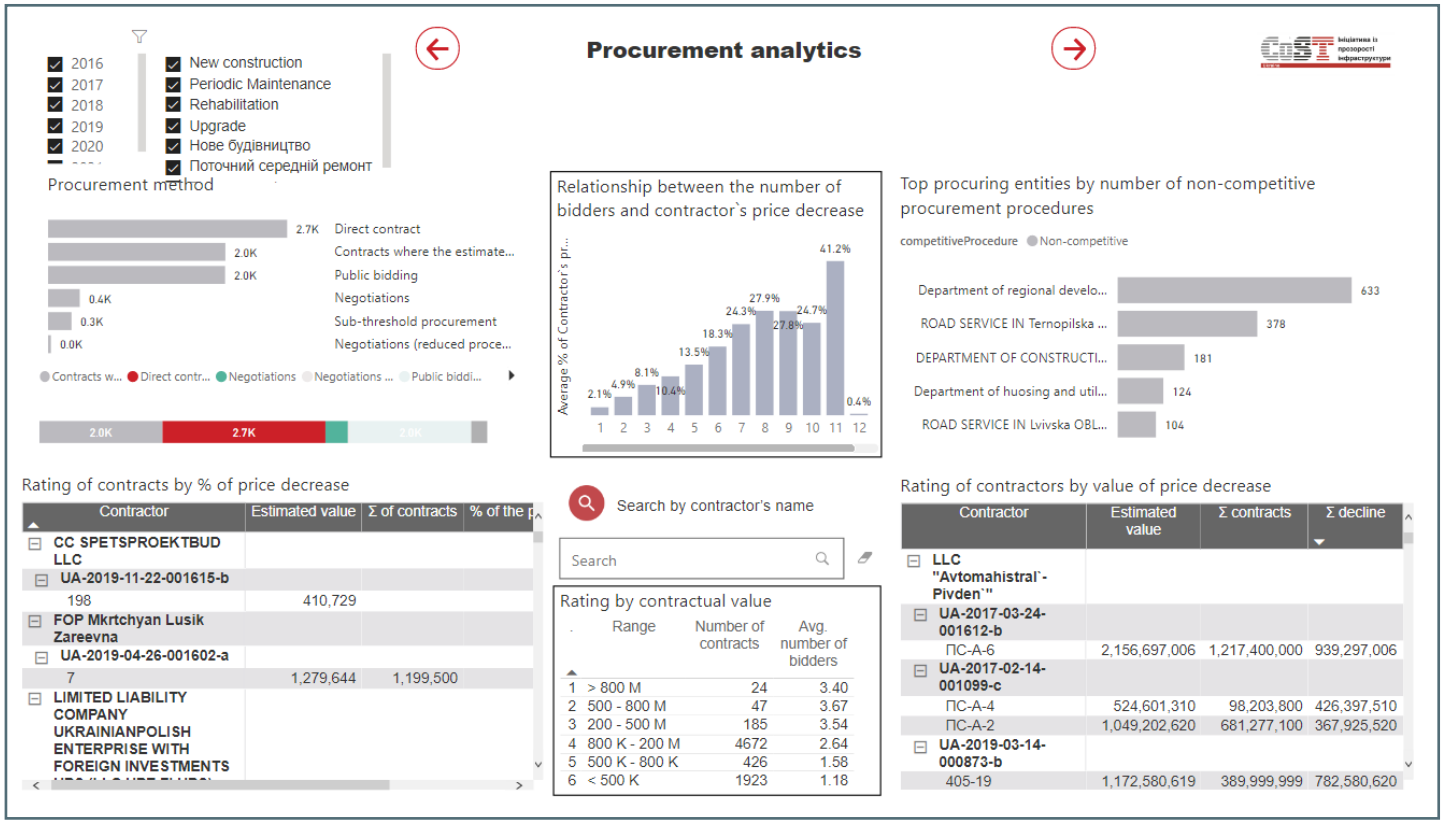


Figure 4.8 Analytical procurement dashboard example based on key aspects (competitive and non-competitive processes)

An IAD as illustrated above can serve as a tool to present data in a visual and straightforward manner. The IAD simply presents the number of processes using different procurement methods, but in doing so serves to highlight which procuring entities are more often using non-competitive procurement methods.

Using tables and charts, the dashboard also correlates, for a range of contract values, the number of bidders and the percentage deviation of contract values from related contract estimates.

4.4 Implementing successful IADs

Based on CoST members' experience and design principles available online, some guidelines follow that will help ensure success when implementing an IAD.

4.4 1 CONSIDER THE AUDIENCE

CoST member secretariats and other interested parties will need to know who is going to use an IAD, as well as the context and access devices. This will inform the process of adding value to available data by presenting it as readily understood information that responds to user needs and facilitates decision making.

4.4.2 PROVIDE CONTEXT

Always try to provide relevant context for information provided. Even if some elements of this may seem obvious, the audience might find it useful. Without providing context, it is difficult for users to know whether the numbers shown in a chart are good or bad, or if they are typical or unusual.

For instance, CoST Ukraine's Transparent Infrastructure IAD includes an overview briefly explaining the content and describing how it was developed. After this initial overview, all axes and charts are named, providing in relevant cases comparison values that help users to visualise where corrective action may be called for (**Figure 4.9**).

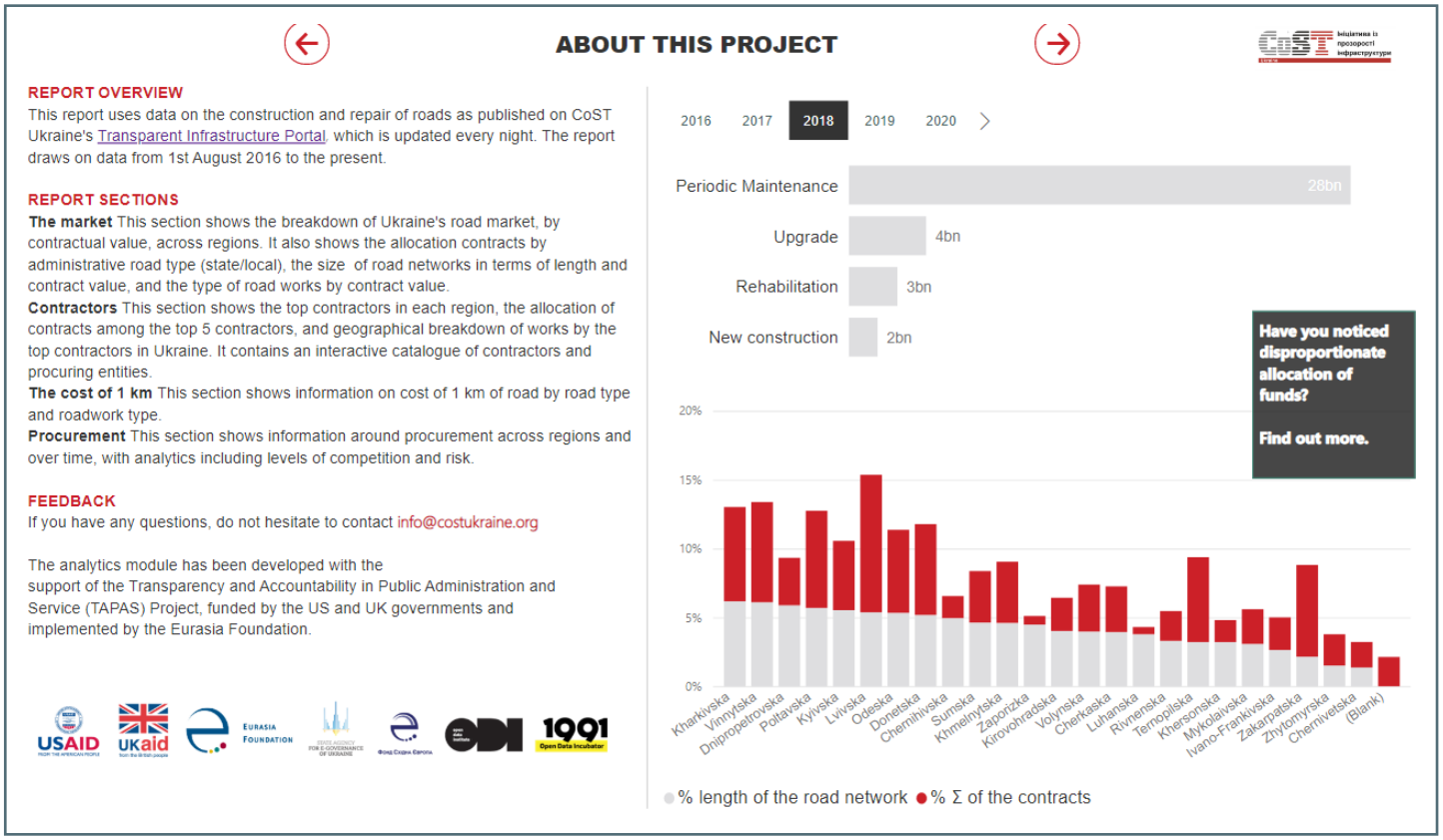


Figure 4.9 Transparent Infrastructure IAD overview

4.4.3 CHOOSE RELEVANT KEY PERFORMANCE INDICATORS

It is important to select the right key performance indicators that will help to shape the content of an IAD, as these metrics will display visual representations of relevant insights based on specific aspects of the infrastructure sector.

For instance, as illustrated in **Figure 4.10**, CoST Honduras selected a few key performance indicators related to the environmental licence data disclosed by the SISOCS web portal. These included number of projects with a license, the number of projects with the correct type of licence, the funding sources and the projects owners.
See Annex 8 for an example to help understand which data points are required to develop an indicator.

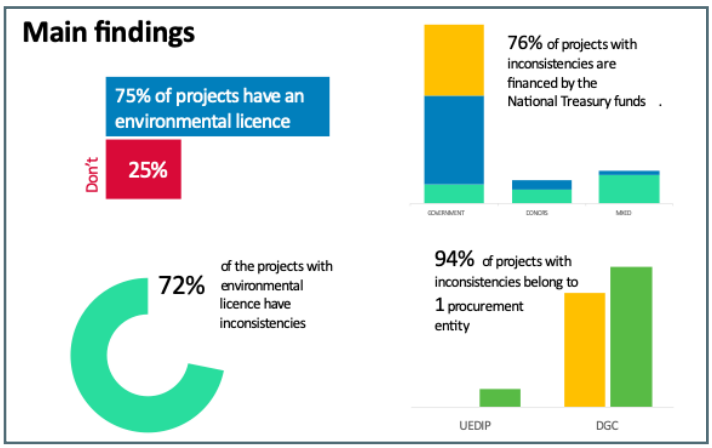


Figure 4.10 Key performance indicators selected to develop the InfraS IAD

4.4.4 SELECT THE RIGHT TYPE OF DASHBOARD AND CHART

Each set of graphics in an IAD should be designed for a particular user group, with the specific aim of assisting them in deciding on an appropriate response. Information is valuable only when it is directly actionable. Additionally, it is important to understand what type of information the CoST member secretariat, multi-stakeholder group and other interested parties want to convey and to choose a data visualisation that is suited to the task. Different types of charts should be selected depending on what an IAD is trying to show: relationship, distribution, composition or comparison.

- **Line charts**: are great when it comes to displaying patterns of change across a continuum. The line chart format is commonly used, so most people can easily analyse them.
- **Bar charts**: are good for quick comparison of items in the same category, for example, page views by country. Again, such charts are easy to understand, clear and compact.
- **Pie charts**: are not the perfect choice. They rank low in precision because users find it difficult to compare accurately the sizes of the pie slices. Although such charts can be instantly scanned and users will notice the biggest slice immediately, there can be a problem in terms of scale, resulting in the smallest slices being so small they cannot be displayed.
- **Sparklines:** usually do not have a scale, which means that users will not be able to notice individual values. However, they work well when there are a lot of metrics and it is only important to show the trends. They can be rapidly viewed and are very compact. For instance, as illustrated in **Figure 4.11**, CoST Ukraine selected a sparklines chart to show the median cost per kilometre of road. Capable of being filtered by year and contract type, this provides an immediate overview how much 1 km costs in most of the contracts and those contracts where the cost is very different. The focus then turns to exploring possible explanations for cases of unusually high per km costs.

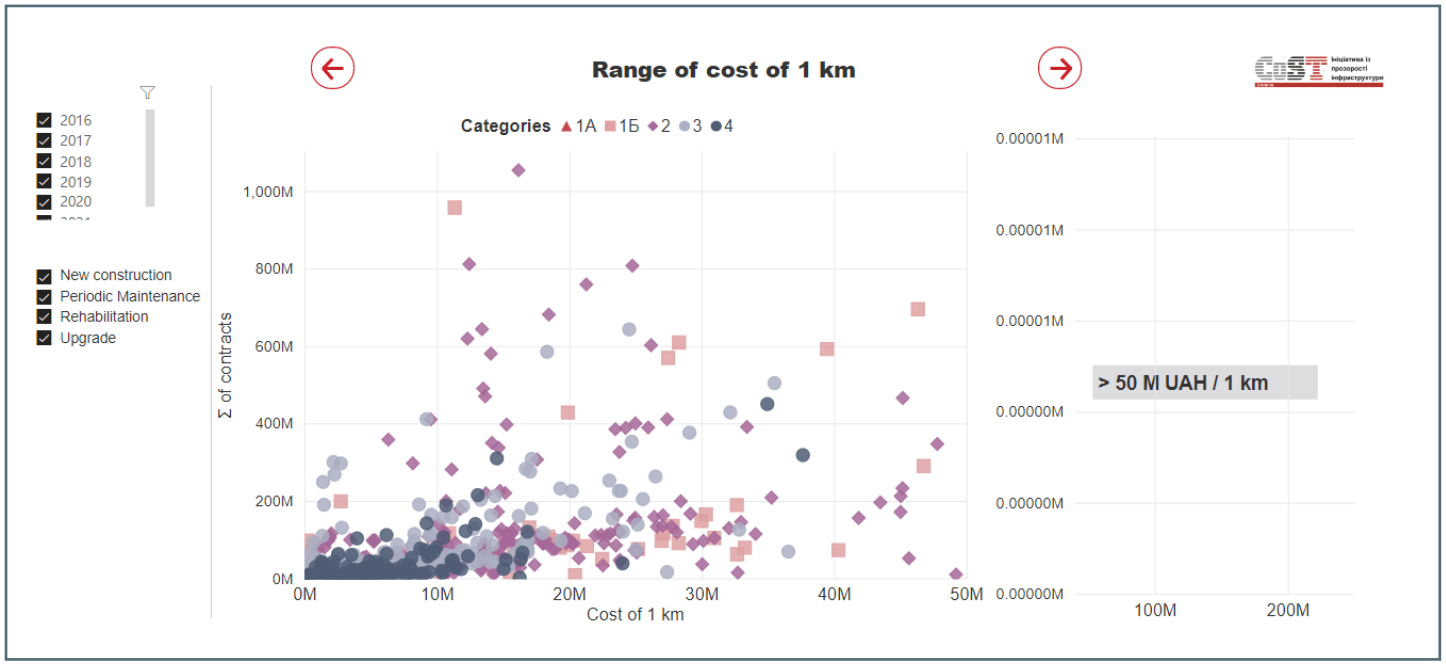


Figure 4.11 Example of sparklines chart in the Transparent Infrastructure dashboard

4.4.5 DO NOT TRY TO PLACE ALL INFORMATION ON THE SAME PAGE.

It is not generally recommended to create a one-size-fits-all dashboards that seeks to cram all the information into a single page. An IAD's audience will normally include different groups of individuals with different needs and interests. If some users really want to see all the data on a single dashboard, it is recommended to use tabs to split the information by theme or subject, making it easier for users to find information.

4.4.6 CHOOSE LAYOUT CAREFULLY

One useful IAD layout suggestion is to start with the big picture. The major trend should be visible immediately. After this revealing first overview, more detailed charts can follow. The charts should be grouped by theme, with the comparable metrics placed next to each other.

Another general suggestion is that key information should be displayed first – at the top of the screen, upper left-hand corner, since most cultures read their written language from left to right and top to bottom. This means people intuitively look at the upper-left part of a page first.

4.4.7 PRIORITISE SIMPLICITY

Focus on simplicity. Designing an IAD dashboard should be a well-thought-through process so that end-users can visualise a simple data story, with the main points highlighted and immediately clear.

For instance, CoST Ukraine has achieved this simplicity by rounding certain numbers on its IAD. This prevented the audience from being flooded with numerous decimal places in the charts, while leaving the details in the tables (**Figure 4.12**).

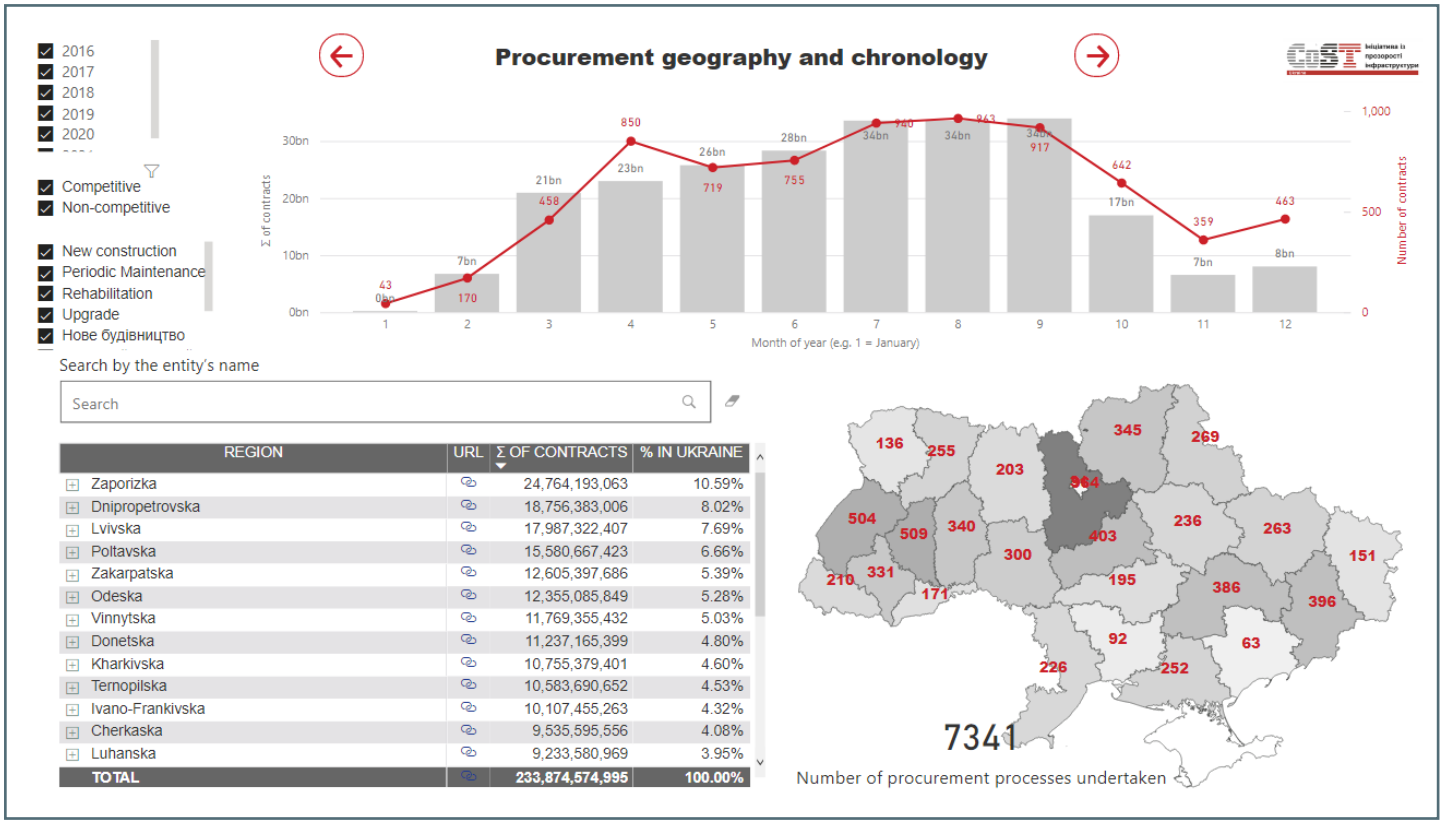


Figure 4.12 Transparent Infrastructure dashboards

4.4.8 BE CAREFUL WITH COLOURS

The interactive nature of an IAD means that they should be minimalist and clean. It is recommended either to use the CoST brand identity (including colours, logo and fonts) or to go for a totally different colour palette that has a meaning, such as the United Nationals sustainable development goals. The important thing is to stay consistent and not use too many different colours. A good approach is to choose just two to three colours and then make use of colour gradients.

The same colour should be used for matching items across all charts. Doing so will minimise the mental effort required from a users' perspective, making an IAD more comprehensible as a result.

When using traffic light colours, for most people red means "stop" or "bad" and green represents "good" or "go." This distinction can prove very useful when designing an IAD, but only when these colours are used accordingly. For example, the InfraS IAD is using maps to present projects that have an environmental licence (**green**), those that present inconsistencies (**amber**), those that do not have one (**red**) and those that do not disclose data (**black**) (**Figure 4.13**).

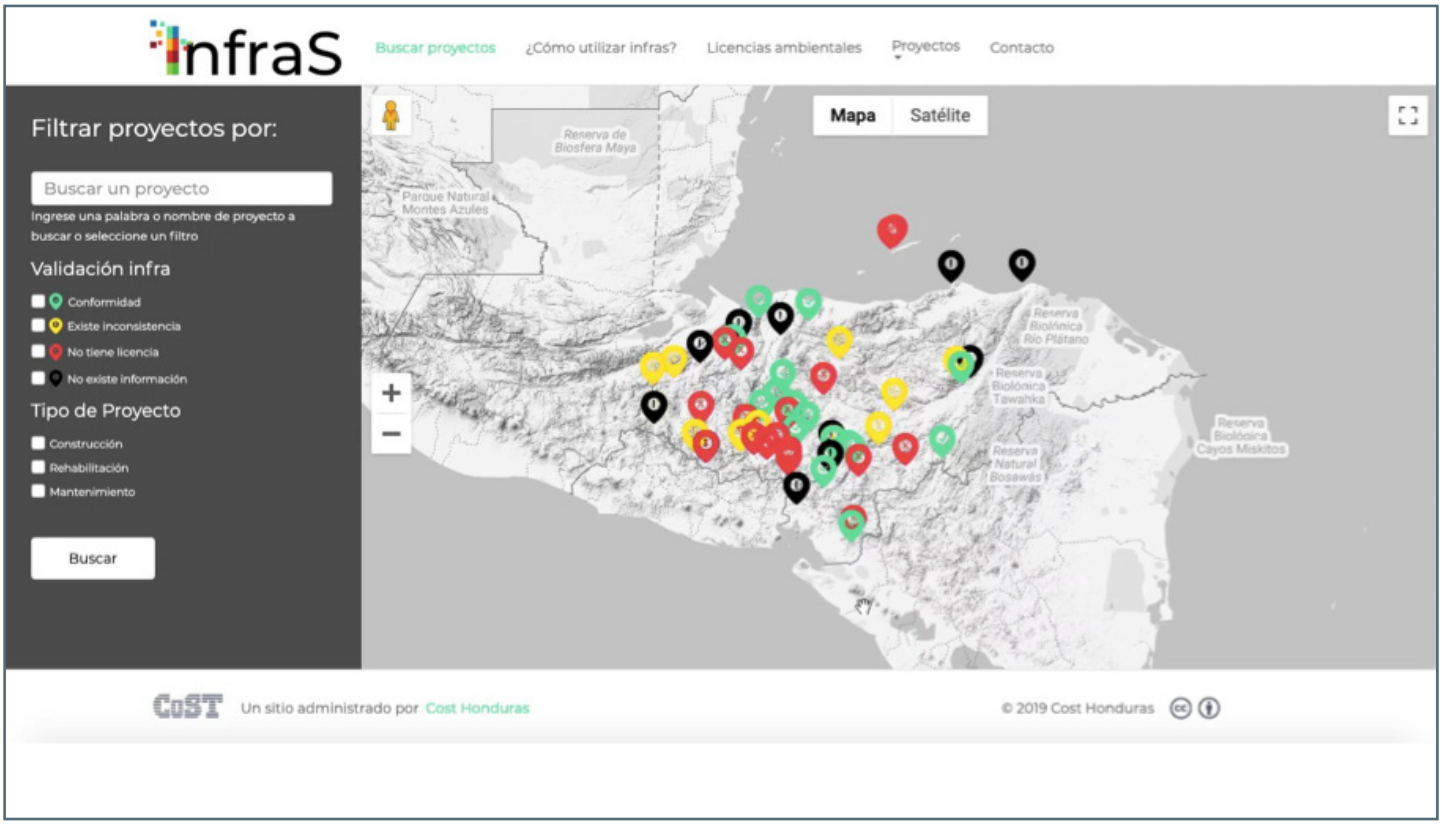


Figure 4.13 InfraS IAD traffic light colours for environmental licences

4.4.9. BE CONSISTENT WITH LABELLING AND DATA FORMATTING

It is important to remain focused on clarity and consistency. Above all else, in terms of functionality, the main aim of an IAD is to achieve the ability to extract important insights at a glance. It is critical to make sure that all labelling and formatting is consistent across key performance indicators, tools and metrics.

4.4.10 NEVER STOP EVOLVING

When designing an IAD, asking for feedback is essential. By requesting regular input from users and asking the right questions, the CoST member secretariat will be able to improve the layout, functionality, look, feel and balance of key performance indicators to ensure optimum value at all times. Asking for feedback on a regular basis will ensure that both the secretariat and users are on the same page.

Every IAD created should exist for a focused user group, with the specific aim of helping procuring entities and other relevant authorities in decision-making processes and transforming digital insights into positive strategic actions.

CoST members are encouraged to document their IADs and share them with other members using infrastructure disclosure platforms.

A guide to document digital tools is available in the infrastructure disclosure platform profile created to manage the CoST GitHub Repository.

5. Annexes

Annex 1: Overview of available tools and other resources

Annex 2: Tool to map the data management processes and disclosure practices in procuring entities.

Annex 3: Tool to help procuring entities in disclosing project data and information.

Annex 4: Examples of disclosure mandates

Annex 5: Template for a disclosure guideline

Annex 6: Example of terms of reference for an information technology developer team

Annex 7: Guide to develop use cases

Annex 8: Example of key performance indicators and related data points

Annex 1. Overview of available tools and other resources

A: Tools described in this manual.

These include tools referred to in the text. Some of them illustrated in Annexes 2 to 8 are available in Excel spreadsheets or Word format. Others are available only online and the links to them are provided in the text of this manual.

B: Associated guidance note

Prepared in parallel with this manual, the updated Disclosure Guidance Note provides a concise summary of the CoST disclosure journey. As such it is an appropriate resource to serve as a general introduction, for those stakeholders who need to have an overview of the subject without going into detail.

C: Resources developed by individual CoST national programmes

In the course of their activities, various CoST national programmes have developed various tools and resources, such as disclosure standards, disclosure guidelines and disclosure manuals, to support procuring entities in extending good practice and to ensure disclosure is conducted in a structured manner. Though often well regarded in the local context, these are not necessarily all suited for broader application. Some of the older manuals and resources may cross the line into activities that are inconsistent with the latest CoST thinking. If such manuals are referred to by other CoST national programmes, they should therefore first be critically reviewed and adapted where appropriate. This may for instance entail only using, or adapting, part of a tool, rather than applying all of it.

Recently developed tools that can be considered as resources or as specific examples when implementing similar ones include the following.

- **Ukraine**: Transparent Infrastructure IAD. The English version is available here and a short video describing it is available here.
- **Honduras**: Sustainable Infrastructure (InfraS) IAD. Prototype under development is available here in Spanish and English.

Annex 2. Tool to map data management process and practice in procuring entities

This tool contains a matrix to help identify the current data management process and practice in the disclosure of project data and information by specific procuring entities. The purpose of the tool is to identify which data points and pieces of information are being generated and disclosed. Additionally, it captures details on: where responsibility lies for disclosing data and information, the format used, the timing, the existence of legal mandates and the disclosure channels used. Ideally it would be completed in a consultation meeting where different well-informed stakeholders, such as: public officials in charge of projects, information officers, procurement specialists, civil society organisations, private sector representatives, as well as by others with experience of disclosing and using data and information.

Matrix to map data management process and practice

PROCURING ENTITY:			FACILITATOR:				DATE:	
Project identification	**Source / Creator**	**Disclosed**	**Publisher**	**Format**	**Channel**	**Timing**	**Legal mandate**	**Remarks**
Project reference number								
Project owner								
Sector, subsector								
Project name								
Project location								
Purpose								
Project description								
Project officials and roles								
Project brief or Feasibility study								
Project preparation	**Source / Creator**	**Disclosed**	**Publisher**	**Format**	**Channel**	**Timing**	**Legal mandate**	**Remarks**
Project Scope (main output)								
Environmental impact								
Land and settlement impact								
Contact details								
Funding sources								
Project Budget								
Project budget approval date								
Multi-year programme& Budget								
Environmental and social impact assessment								
Resettlement and compensation plan								
Financial agreement								
Procurement plan								
Project approval decision								
Tender Management	**Source / Creator**	**Disclosed**	**Publisher**	**Format**	**Channel**	**Timing**	**Legal mandate**	**Remarks**
Procuring entity								
Procuring entity contact details								
Procurement process								
Number of firms tendering								

Template for proactive disclosure

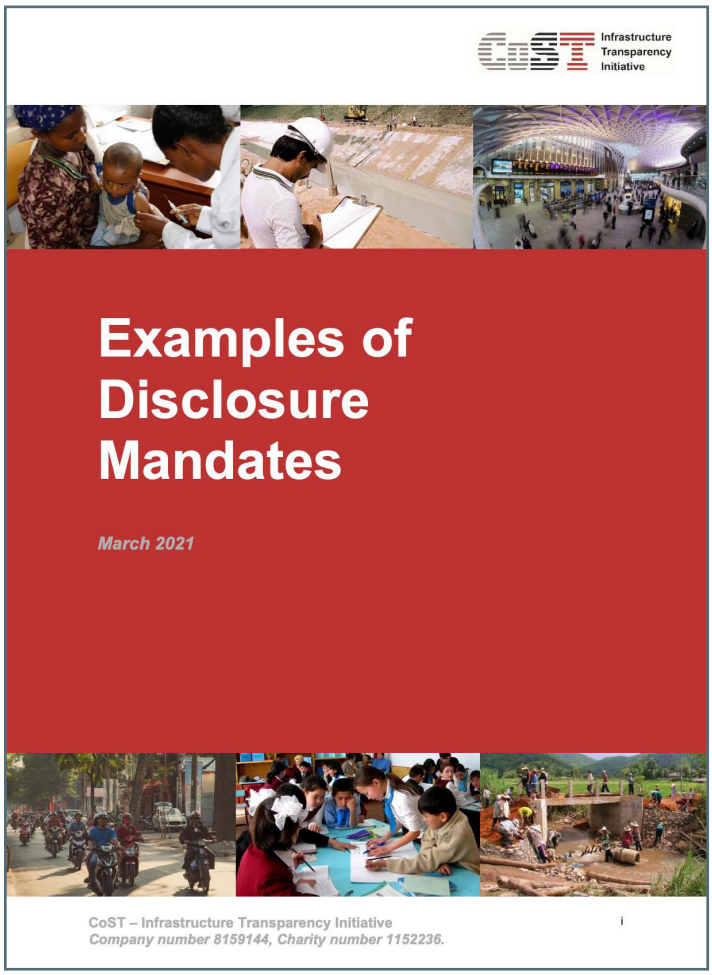
DATE:		LAST UPDATE:	
Project stage	Project data item	Data	
Project Identification (7)	Project reference number		
	Project owner		
	Sector, subsector		
	Project name		
	Project location		
	Purpose		
	Project description		
Project Preparation (7)	Project Scope (main output)		
	Environmental impact		
	Land and settlement impact		
	Contact details		
	Funding sources		
	Project Budget		
	Project budget approval date		
Tender Management (14)	Procuring entity		
	Procuring entity contact details		
	Procurement process		
	Number of firms tendering		
	Cost estimate		
	Contract type		
	Contract administration entity		
	Contract title		
	Contract firm(s)		
	Contract price		
	Contract scope of work		
	Contract start date		
	Contract duration		
	Contract status (current)		
Implementation (6)	Variation to contract price		
	Escalation of contract price		
	Variation to contract duration		
	Variation to contract scope		
	Reasons for price changes		
	Reasons for scope and duration changes		
Project Completion (6)	Project status (current)		
	Completion cost (projected)		
	Completion date (projected)		
	Scope at completion (projected)		
	Reasons for project changes		
	Reference to audit and evaluation reports		

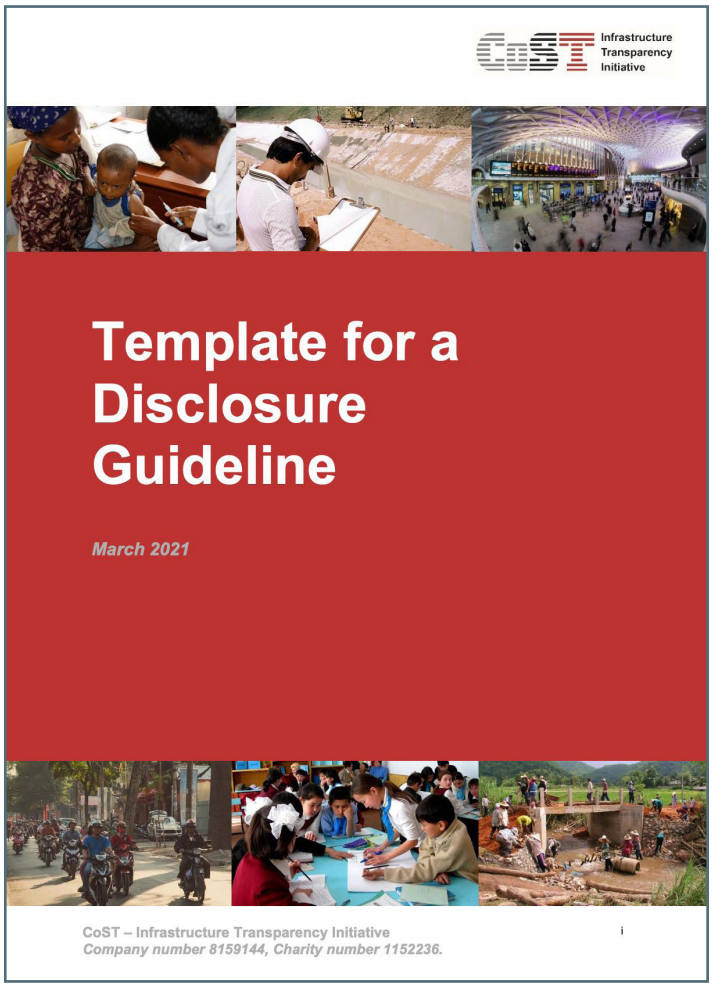
Annex 3. Tool to help procuring entities in disclosing project data and information

This tool serves as a template to help a procuring entity manage the disclosure of data and optional or additional information at each of the project and contract procurement stages set out in the CoST IDS. It should be applied up to the extent of applicable disclosure mandates. In the absence of such mandates, the source of guidance regarding scope should be a voluntary agreement entered into after completion of a mapping exercise addressing data management processes and practices.

Annex 4. Examples of disclosure mandates

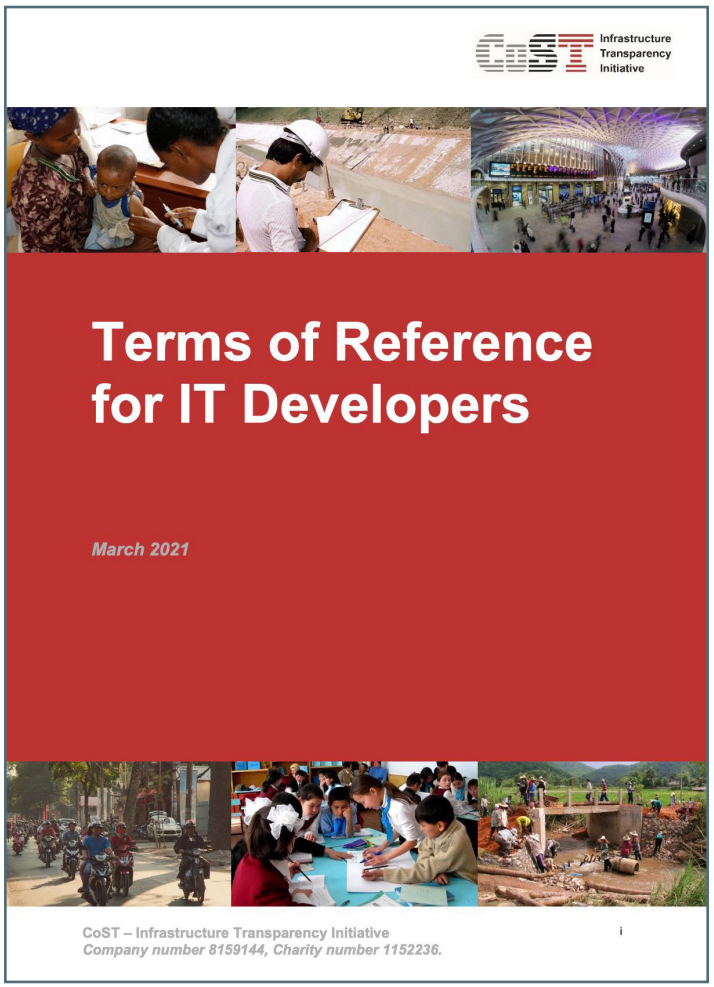
These examples are intended to help CoST secretariats and multi-stakeholder group members identify different approaches, types and content of disclosure mandates based on CoST member experiences in Honduras, Guatemala and Malawi.





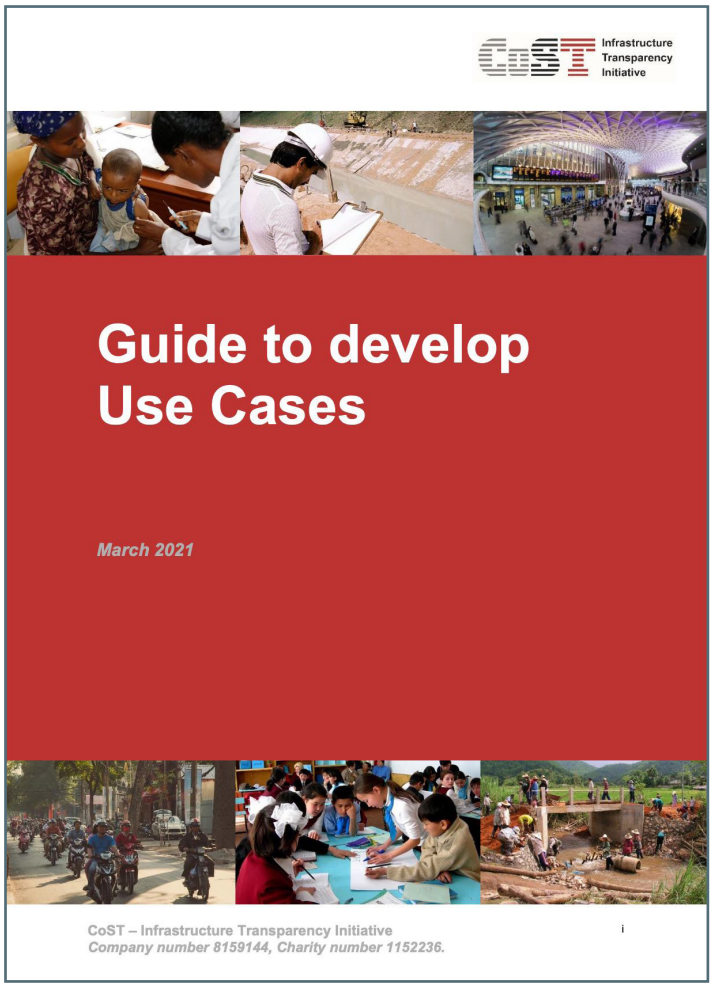
Annex 5. Template for a disclosure guidelines

This template is intended to help CoST secretariats support procuring entities in drafting disclosure guidelines after identifying and agreeing with participating procuring entities the data points to be disclosed, the dissemination channels to be used and the data format to be adopted. With reference to established legal mandates, it will also serve to clarify the timing of disclosure and the allocation of responsibility for every aspect of the process, including quality assurance and approvals.



Annex 6. Example of terms of reference to appoint information technology developers

This example, which also includes a template, is intended to help a CoST member secretariat and its partners write terms of reference for developing and implementing an online disclosure platform based on the OC4IDS.



Annex 7. Guide to develop use cases.

This guide is intended to help CoST member secretariats, their partners and information technology developer teams to facilitate developing and writing up of use cases when they are supporting the design and implementation of online disclosure platforms, or are developing IADs.

Annex 8. Example of key performance indicators and related data points

This tool serves as a simple example of key performance indicators (KPIs) associated with different use cases and the data points needed to produce a visualisation indicating type of graphic, rationale, data sources and fields related to the CoST IDS and the OC4IDS format.

Example of KPI's and related data points

#	Use Case	KPI	Data needs	OC4IDS data	Fields	Rationale	Graphic visualisation	Source	Type of graphic
1	Market oportunity	Percentage of contracts awarded to the top 10 suppliers with the total amount of contracts awarded	*Bidder ID *Award information of winning bids	awards/procuringEntity/identifier contracts/id contracts/awardID entity_id	Company name Number of contracts Sum of contracts Year	A high percentage of contracts awarded to major suppliers may indicate a weaker market opportunity. The analysis of the concentration of the overall contracted value gives an idea of how inclusive and competitive the overall market is.	* Graph showing which are the 10 companies that have the highest amount of contract valuess. With the possibility to filter by Procuring Entity. ** Table with company name, number of contracts awarded, total sum of contracted amounts	Sisocs	Column chart
2	Market oportunity	Contractors with higher contract value per department	*Bidder ID *Award information of winning bids	Project location Contract final value procuringEntity	Company name Contract Name Type Department Latitude Length Amount per contract Year	The concentration of investment in certain regions of the country in charge of the same companies may indicate weaknesses in investment marking and prioritization opportunities. On the other hand, this analysis could support the opening of new investment in different regions of the country for medium and small enterprises.	A map showing in which departments are the top 10 companies with the contracted amount	Sisocs	Scatter
3	Market oportunity	Average bids per supplier	Information about the bidding process	tender/id awards/procuringEntity/identifier/id	Average number of bidding process per supplier	The higher the average number of processes a supplier participates in, the more competitive the overall procurement system will be	Average number of tenders in which a supplier participates	Sisocs	Speedometer (with ranges to be defined)
4	Market oportunity	Average suppliers per bid	*Tender ID *Bidder information	tender/id tender/numberOfTenderers OR tender/tenderers/id	Average number of bidding companies per year	A higher average number of bidders may indicate that competition is fairer. In addition, it may indicate greater competition and confidence in the procurement system	Average number of participants in bidding processes	Sisocs	Speedometer (with ranges to be defined)
5	Market oportunity	Average bidders per bidding process	*Tender ID *Bidder information	tender/id tender/numberOfTenderers OR tender/tenderers/id	Company Name Number of tenders submitted (bidding) Year	A higher average number of bidders may indicate that competition is fairer. In addition, it may indicate greater competition and confidence in the procurement system	Average bidders by contract value: pending range definition	Sisocs	Dynamic table
6	Market oportunity	Percentage of tenders with at least three qualified bidders	Bidder Information/Prequalification Process	tender/id tender/numberOfTenderers OR tender/tenderers/identifier/id bids/validBids (Bid Extension)	Prequalification list	A percentage of tenders with three or more prequalified bidders may indicate highly competitive tenders, which may be related to the effective preparation from a PE and could guarantee a better market price	This indicators can be reflected in a ring chart showing the percentage of the total amount contracted through prequalified biders.	Sisocs	TBD

Ministry of Foreign Affairs of the Netherlands