



# Terms of Reference for IT Developers

*March 2026*



## Acronyms and Initialisms

CoST	Infrastructure Transparency Initiative
IDS	Infrastructure Data Standard
IDP	Infrastructure Disclosure Platforms
IPPI	Information Platform for Public Infrastructure
OC4IDS	Open Contracting for Infrastructure Data Standard
OCDS	Open Contracting Data Standard
SISOCS	Information and Monitoring System for Works and Supervision Contracts
ToR	Terms of Reference

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# 1 Introduction

This template and examples of Terms of Reference (ToR) are intended to CoST- The Infrastructure Transparency Initiative- Member Secretariats and their partners to facilitate developing of customized ToR to appoint a team of IT developers in charge of designing or and implementing or upgrading a disclosure platform aligned with the Open Contracting for Infrastructure Data Standard ([OC4IDS](#)).

# 2 Template of Terms of Reference for an IT Developer Team

## TERMS OF REFERENCE

[Consulting Services Title]

[Month-Year]

### I. BACKGROUND AND CONTEXT

[Insert here the project overview].

### II. SCOPE OF WORK

[ Insert here what is expected from the IT developer in the process of designing and implementing or upgrading a disclosure platform]

### IV. DESCRIPTION OF DELIVERABLES AND TIMELINES

[ Insert here what will be the expected outputs and when they are expected in a timeline]

### V. DURATION OF CONTRACT

[ Insert here the period estimated to complete the deliverables. The experience shows that this could be a 4–6-month period depending on the capacities and dedication of time to the project from an individual consultant or a team]

### III. QUALIFICATION OF CONSULTANT OR TEAM

[ Insert here individual or team qualifications provided in the examples]

### VI. REPORTING REQUIREMENTS

[ Insert here the name of the contract supervisor the reporting meetings, presentations, internal and external approvals process as necessary]

### VII. PROPOSALS

[ Insert here information on when, where, and how submit a proposal]

# 3 Examples of Terms of Reference for IT Developer Teams

## TERMS OF REFERENCE

**Design and implementation of an infrastructure disclosure platform**

**Consulting and training services**

**March 2021**

### I. BACKGROUND AND CONTEXT

Based on the results of an Introduction to CoST Workshop in South East Asia in 2017, the [Infrastructure Transparency Initiative](#) (CoST) submitted a project proposal to the Foreign and Commonwealth Office (FCO) to support the implementation of the CoST initiative in Indonesia and Thailand.

The project is administered by UNDP Regional office in Bangkok and aims to facilitate disclosure of infrastructure projects in Indonesia by customizing and implementing the existing open-source code of the Information and Monitoring System for Works and Supervision Contracts (SISOCS<sup>1</sup>) developed and own by the Government of Honduras.

CoST West Lombok intends to engage the services of an experienced consultant to assist in the implementation of this activity. The services expected are described below under the scope of work and the duties and deliverables expected of the consultant.

### II. SCOPE OF WORK

The consultant will work under the supervision of the CoST Regional Manager for Asia and the support of the Infrastructure Disclosure Platforms (IDP) manager to undertake the following:

1. Review the Open Contracting for Infrastructure Data Standard and seek for advice from the Helpdesk, as necessary.
2. Review the SISOCS open-source code with support from the [CoST Infrastructure Disclosure Platforms](#) manager.
3. Review the owner's disclosure platform info technology resources and capacities and then match them with the SISOCS open-source code and the OC4IDS requirements.
4. Create a work plan identifying the best fit for customizing and implementing the solution in Indonesia detailing all activities, work meetings with client's team, requirements of information and other resources and deadlines to submit deliverables.

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<sup>1</sup> <https://sisocs.org>

5. Complete the mapping templates required by the OC4IDS documentation.
6. Generate an implementation strategy to customize the SISOCS open-source code. This strategy involves the identification of fields, features, security roles and permissions and analytics.
7. Produce a wireframe that shows the customized platform for Indonesia and its features.
8. Consult with various stakeholder on the wireframe and fine tune based on feedback.
9. Produce a system architecture document that shows the flow of data in the system.
10. Create the required code customized to the Indonesian context and perform all the quality assurance tests.
11. Generate an implementation strategy for the publication of an open data machine readable format that follows the OC4IDS. This implementation strategy needs to define specific endpoints and various methods of how users or other systems can access data or integrate with it.
12. Create the required technical documentation on how to install, maintain and configure the platform. Provide user guides, Frequently Asked Questions, and screencast videos for end-users.
13. Share lessons learned and contribute via GitHub to improve the CoST GitHub Repository based on the experience particularly in case extensions and features are develop specifically for the Indonesian context.
14. Develop trainings for different types of users: administrators (mainly IT staff) and internal users (those who will be disclosing information and using the system in their day-to-day activities).

### **III. QUALIFICATION OF CONSULTANT TEAM**

- Must have 7+ years of work experience and a demonstrated ability to work on the development of information systems with advanced architectures and complex data workflows.
- Must be familiar with JSON format and JSON schemas.
- Must understand open source and collaborative software development platform (GitHub).
- Must have a general understanding of Procurement processes and infrastructure projects.
- Must have good communication skills and demonstrated ability to lead the work on complex projects.
- English and Indonesian languages are required.
- Previous experience developing an Application Programming Interface (API) is a plus.

### **IV. DESCRIPTION OF DELIVERABLES AND TIMELINES**

The outputs to be delivered by the consultant are:

- Detailed work plan.
- Wireframe showcasing the different features and fields that will be on the system.
- System architecture document.

- Working platform that implements all features and the open data machine readable format.
- Documentation target for platform administrators and maintenance, developers, and end users.
- A training evaluation report that includes feedback from trained users.
- Feedback on the CoST IDP and lessons learned from the implementations.

## **V. DURATION OF CONTRACT**

It is expected that the assignment will be concluded (completion of all tasks) over a maximum period of 3.5 months within the start of the contract.

## **VI. REPORTING REQUIREMENTS**

The consultant will work under the supervision of the CoST West Lombok Manager, who will coordinate interaction with other CoST team members (Asia Regional Manager and Data Specialist).

## TERMS OF REFERENCE

### For Upgrading the Infrastructure Platform for Public Infrastructure (IPPI) Web System

January 2021

#### I. INTRODUCTION

CoST, the Infrastructure Transparency Initiative, acting under a consortium of Partnership for Transparency Fund (PTF) and Integrity Platform (IP), have received a three-year grant towards “*Strengthening the Capacity of CSOs to promote Transparency and Accountability in Public Infrastructure Projects in Malawi*”. CoST intends to apply part of these funds towards upgrading of its disclosure portal, the Information Platform for Public Infrastructure (IPPI).

IPPI is an important tool for fostering transparency and accountability of public construction projects in Malawi. Its core feature is disclosure, which is focused on ensuring that Infrastructure Data Standard (IDS) is open and accessible to the public throughout the project cycle, and that it is disclosed in a timely manner. Key to the process is disclosure by government procuring entities and disposing in accordance with the Procurement Regulations (2020).

IPPI was developed in 2017 and was designed and modelled on an existing disclosure portal from a CoST sister country, Honduras, called SISOCS. The current data structure was developed to suit the identified needs at the time and now needs enhancing to conform to international standards and ensure that it is easily accessed by other open dataset systems for further deep analysis.

The new system will be modelled on Open Contracting for Infrastructure Data Standard (OC4IDS) an internationally recognized open data standard which support the approach to disclosing infrastructure project data based on both the CoST IDS and the Open Contracting Data Standard (OCDS).

Therefore, CoST is looking for a software development firm to upgrade the IPPI system in accordance with the OC4IDS standards as well as to redevelop the interface to suit current UX trends.

#### II. PURPOSE

The main objective of the assignment is to upgrade the IPPI system to integrate the OC4IDS standards and redesigning the user interface.

Specifically, the contractor will:

1. Map project-level data and contracting process data.
2. Develop detailed prototypes of the new IPPI system and system architecture documentation.
3. Upgrade the database schema to reflect the new database using the OC4IDS.
4. Create the required code modification to IPPI and perform all the quality assurance tests.
5. Report of consultation with stakeholders, focused on software adjustments.
6. Make necessary changes to the user interface of the web application on the management side to make it easy for users to manage information.

7. Redesign the front-end interface to make it easy for the public to access information from the portal.
8. Develop an android application to be used by the public to access information, send queries and access feedback.
9. Develop all the documentation for internal users (administrators, publishers, quality control and clearances, external users) and conduct a series of training for different types of users before handing over the system.

### **III. KEY DELIVERABLES**

1. Completed OC4IDS mapping templates.
2. Prototypes of the new IPPI system and system architecture document
3. New database schema following the OC4IDS.
4. Secure Application Programming Interface (API) endpoints for external systems to be able to get data from the IPPI.
5. An upgraded back-end interface
6. An upgraded front-end interface allowing individual and massive downloads of data.
7. An Android application for public users to access information from the IPPI system.
8. Detailed documentation of how to use the system for back and end users including a publication policy.
9. Training plan for pilot Procuring Entities (PEs) and training evaluation report that include feedback from users.
10. Mid-term evaluation report of the implementation and administration of the system and recommendations.
11. Final report of the implementation and administration of the system and recommendations.

### **IV. TIMEFRAME**

CoST expects the assignment to be completed 4 months after the signing of the contract.

### **V. QUALIFICATION REQUIREMENTS**

- The team leader must have at least a bachelor's degree in computer science or a related discipline
- The firm must have at least 3 years' experience developing web systems.
- At least one team members must have a general understanding of procurement processes.
- Familiarity with OC4IDS or JSON schema will be an added advantage.
- Previous experience developing an Application Programming Interface (API) is a plus
- A proven track record of developing web systems.
- Good communication skills and demonstrated ability to create technical documentation, and guidelines for back and end users.

### **VI. SUBMISSION OF PROPOSALS**

Interested consultant(s) should submit technical and financial proposals and attach cover letter and up-to-date CVs of the core team.

Proposals should be submitted to the address below either in electronic or hard copy form and must be clearly indicated 'Proposal for the upgrading of the IPPI system' by 17:00 hours local time on Friday 18th January 2021.

**The Chairman**

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Construction Sector Transparency Initiative (CoST)



Construction Sector Transparency Initiative (CoST)

