

Terms of reference (ToR) for the procurement of services below the EU threshold

CONFIDENTIAL

Local Corruption Analytic Dashboard Development	Project number/ cost centre:
	19.2118.8-001.00

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0. List of abbreviations

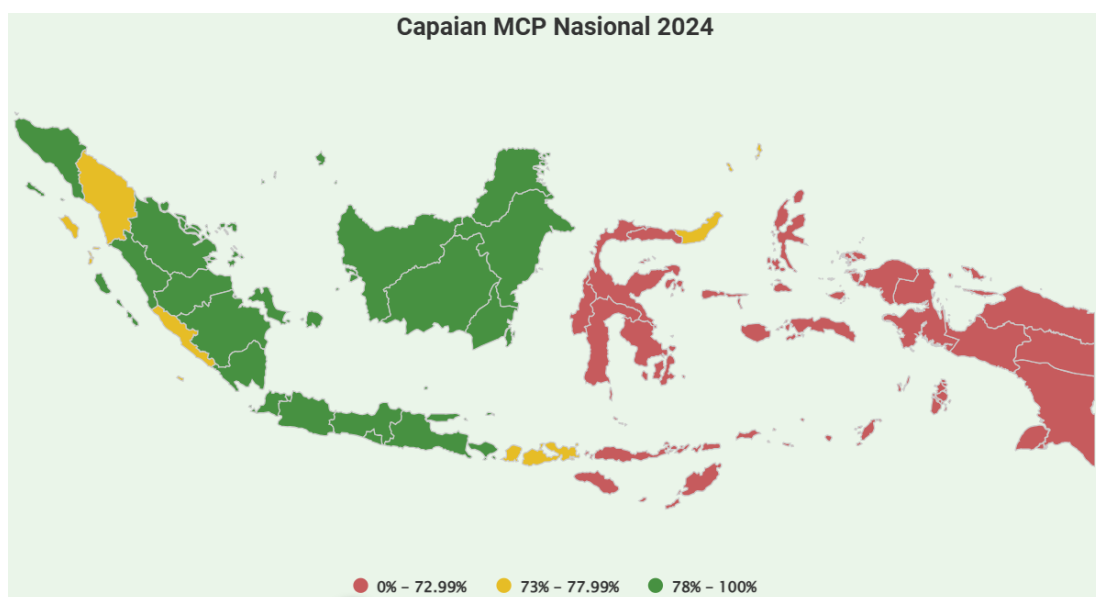
AG	Commissioning party
AN	Contractor
AVB	General Terms and Conditions of Contract for supplying services and work
FK	Expert
FKT	Expert days
KZFK	Short-term expert
ToRs	Terms of reference

1. Context

The Government of the Republic of Indonesia and the Government of the Federal Republic of Germany signed an agreement on the implementation of the Forestry Sector Anti-Corruption Program on August 1, 2022, with the aim of improving the effectiveness of corruption prevention in the forestry sector. One of the agreed outcomes is the enhancement of the institutional capacity of the Corruption Eradication Commission (KPK) and local governments (Pemda), as well as other selected institutions, in preventing corruption in the forestry sector and other strategic sectors. The selected institutions include the Ministry of Home Affairs (Kemdagri), the Ministry of Finance (Kemenkeu), the National Development Planning Agency (Bappenas), the Government Procurement Policy Agency (LKPP), and the Financial and Development Supervisory Agency (BPKP).

In collaboration with the above strategic institutions, the KPK has sought to prevent corruption in local government in the strategic sectors of planning, budgeting, government procurement of goods and services, internal monitoring, public services (licensing, education, health, population and civil registration), civil service management, management of regional assets (BMD), optimization of regional revenue (PAD), and strengthening the Internal Government Monitoring Agency (APIP). The Corruption Prevention Indicators for Local Governments (IPKD) for each sector are published annually by the KPK. The public can participate in monitoring local government achievements through the Monitoring for Corruption Prevention (MCP) dashboard on the website <https://jaga.id/jendela-pencegahan>.

Since MCP was first launched in 2019, each local government has been required to upload documents/images as proof of compliance with the requested indicators. From this, we can see that some local governments have met the target indicators (green), but there are still many local governments that are below the target (yellow and red). As an illustration, we can refer to the following image of the national MCP achievement for 2024:



Source: Jaga, 2024

Each local government will upload the documents required for each indicator. The documents will be analysed by a team of verifiers from the KPK, who will then assign a score. In addition to assigning scores, the KPK is also expected to formulate contextual and personalized corruption prevention recommendations for each local government. At this stage, documents uploaded by local governments often do not meet all indicator requirements and/or frequently miss deadlines. As a result, recommendations, coordination, and supervision of corruption prevention efforts become less effective.

The development of artificial intelligence (AI) or machine learning technology has provided opportunities for the KPK, local governments, and strategic institutions to improve the effectiveness of local government corruption prevention, which will indirectly trigger improvements in the quality of data and information management, which are indicators of IPKD. The KPK plans to use AI to develop a dashboard mapping the corruption risks of local governments, utilizing data and information collected and managed by systems developed by ministries/agencies. Some of the systems whose data will be maximized for corruption prevention include the Regional Development Information System (SIPD), the Regional Financial Information System (SIKD), the Electronic Procurement System (SPSE), and the Online Single Submission (OSS). As a result, the resources of the KPK, local governments, and other strategic agencies will be more focused on corruption prevention activities based on more in-depth and comprehensive recommendations. They will no longer be drained by the process of uploading supporting data/documents, verification, and manual analysis.

Thus, the Local Corruption Analytic Dashboard Development aims to:

1. Integrate internal data (including data from SIPD managed by the Ministry of Home Affairs) and relevant external KPK data to map potential corruption risks in the regions
2. Provide an interactive visual display to facilitate data-based monitoring, analysis, and decision-making
3. Map corruption risks in MCP intervention areas with corruption risk indicator analysis
4. Develop AI and Machine Learning-based analytical models to improve the accuracy of corruption risk monitoring and prediction
5. Enhance the effectiveness of KPK coordination and supervision in preventing corruption in the regions
6. Provide data-driven recommendations to support KPK prevention and supervision interventions based on corruption risk scores in the regions

Meanwhile, the objectives of the Local Corruption Analytic Dashboard Development include:

1. Corruption Eradication Commission (Deputy for Coordination and Supervision)
 - Facilitates monitoring and analysis of corruption risks in the regions
 - Supports data-driven decision-making in the supervision and intervention of regions with high vulnerability levels
 - Strengthens corruption prevention strategies through data-driven recommendations
2. KPK stakeholders (Ministry of Home Affairs and BPKP and other stakeholders related to the intervention area)
 - Support the evaluation and improvement of local government governance policies in specific areas of intervention, such as compliance in budget management, etc.
 - Optimize supervision

- Utilize data for more accurate planning and policy-making.
3. Local Governments (Pemda)
- As a monitoring tool, local governments can use dashboards to improve transparency and accountability in specific areas of intervention
 - Improve understanding of corruption risks in their regions
 - Encourage more effective implementation of MCP based on data and analytics
 - Provide references for improving local government governance policies

In order to support the strengthening of the KPK, local governments, and other strategic institutions to prevent corruption more effectively through the development of an AI-based Local Corruption Analytic Dashboard, GIZ intends to collaborate with consultants in the form of companies or corporations capable of providing Local Corruption Analytic Dashboard Development services for a period of August to December 2025. The consultant team is expected to consist of: project manager (1 person); UI/UX designer (1 person); data engineer (1 person); data scientist (1 person); BI developer (1 person); and full-stack programmers (2 people).

2. Tasks to be performed by the contractor

The contractor is responsible for providing the following services:

1. Developing dashboard prototype
2. Developing source code (Modeling Script and Dashboard)
3. Developing Application Programming Interface (API)
4. Finalizing Local Corruption Analytic Dashboard
5. Integrating dashboard into MCP
6. Developing technical documents (Software Desain dan Mockup, Technical Document)
7. Developing non-technical documents (User Requirements, User Acceptance, User Guide)
8. Providing reports (Minutes of Meeting, Work Progress Report, and Final Report)
9. Developing material and conducting knowledge sharing session

The results:

1. Dashboard prototype
2. Source code (Modeling Script and Dashboard)
3. Application Programming Interface (API)
4. Local Corruption Analytic Dashboard
5. Integrated dashboard into MCP
6. Technical documents (Software Desain dan Mockup, Technical Document)
7. Non-technical documents (User Requirements, User Acceptance, User Guide)
8. Reports (Minutes of Meeting, Work Progress Report, and Final Report)
9. Material for knowledge sharing session

Certain milestones, as laid out in the table below, are to be achieved during the contract term:

Output/Milestones/partial works	Expected Deadline/place /person responsible	Criteria for acceptance	Work % / Estimated Payment
Output 1: Developing dashboard prototype Providing reports (minutes of meeting, progress report)	30 September 2025/Jakarta/Team Leader	Approved dashboard prototype Approved progress report	40% 1 st Interim payment after approval of OUTPUT 1
Output 2: Developing source code (Modeling Script and Dashboard) Developing Application Programing Interface (API) Finalizing Local Corruption Analytic Dashboard Providing reports (minutes of meeting, progress report)	30 October 2025/Jakarta/Team Leader	Approved Local Corruption Analytic Dashboard Approved progress report	30% 2 nd Interim payment after approval of OUTPUT 2
Output 3: Integrating dashboard into MCP Developing technical documents (Software Desain dan Mockup, Technical Document) Developing non-technical documents (User Requirements, User Acceptance, User Guide) Providing reports (Minutes of Meeting, Work Progress Report, and Final Report) Developing material and conducting knowledge sharing session Providing reports (minutes of meeting, progress report)	30 November 2025/Jakarta/Team Leader	Integrated Local Corruption Analytic Dashboard into MCP Report on Local Corruption Analytic Dashboard Training for KPK, local government and ministries Approved progress report	30% FINAL payment after approval of OUTPUT 3 & 4
Output 4: Submitting final report	3 December 2025/Jakarta/Team Leader	Approved Final Report	

Period of assignment: from **18 August 2025** until **10 December 2025**.

3. Concept

In the tender, the tenderer is required to show *how* the objectives defined in Chapter 2 (Tasks to be performed) are to be achieved, if applicable under consideration of further method-related requirements (technical-methodological concept). In addition, the tenderer must describe the project management system for service provision.

Note: The numbers in parentheses correspond to the lines of the technical assessment grid.

Technical-methodological concept

Strategy (1.1): The tenderer is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1 Context) (1.1.1). Following this, the tenderer presents and justifies the explicit strategy with which it intends to provide the services for which it is responsible (see Chapter 2 Tasks to be performed) (1.1.2).

The tenderer is required to present the actors relevant for the services for which it is responsible and describe the **cooperation (1.2)** with them.

The tenderer is required to present and explain its approach to **steering** the measures with the project partners (1.3.1) and its contribution to the **results-based monitoring system** (1.3.2).

The tenderer is required to describe the key **processes** for the services for which it is responsible and create an **operational plan** or schedule (1.4.1) that describes how the services according to Chapter 2 (Tasks to be performed by the contractor) are to be provided. In particular, the tenderer is required to describe the necessary work steps and, if applicable, take account of the milestones and **contributions** of other actors (partner contributions) in accordance with Chapter 2 (Tasks to be performed) (1.4.2).

The tenderer is required to describe its contribution to knowledge management for the partner (1.5.1) and GIZ and to promote scaling-up effects (1.5.2) under **learning and innovation**.

Project management of the contractor (1.6) -not applicable-

Further requirements (1.7)

The process of completing the activity is expected to use the Cross Industry Standard Process for Data Mining (CRISP-DM) data processing method, and then the results of data processing and machine learning will be implemented in the form of analytical dashboard development using the system development method with the following stages:

1. Crisp-DM Method
 - a. Business Understanding
Understanding the MCP business process and determining corruption risk indicators and regional priorities for coordination and supervision.
 - b. Data Understanding

Understanding of data requirements, where the data used broadly consists of internal data and external data from the KPK. Internal data includes MCP achievement data, public complaint reporting data, and/or other relevant internal data. External data from the KPK related to the Korsupgah intervention area includes budget management data from the SIPD application managed by the Ministry of Home Affairs, LKPP tender data, and/or other relevant data.

c. Data Preparation

Internal and external data will be prepared on the Development Server and then undergo cleansing/pre-processing.

d. Modeling

Perform modeling and select modeling methods according to analysis requirements.

e. Evaluation

Evaluation and recommendations for models that are appropriate for coordination and supervision needs in the region

2. Preparation of APIs for data analysis/machine learning modeling results for implementation.
3. Implementation of Analysis/Modeling Results into the Development of Interactive Dashboards.
4. Reports and Recommendations Reports consist of Work Progress Reports, Final Reports, and Technical Reports.
5. Implementation of a sharing session for the Directorate of Information Management and MCP Management; and GIZ

4. Personnel concept

The tenderer is required to provide personnel who are suited to filling the positions described, on the basis of their CVs (see Chapter 7), the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points in the technical assessment.

Team leader

Tasks of the team leader

- Overall responsibility for the advisory packages of the contractor (quality and deadlines)
- Coordinating and ensuring communication with GIZ, partners and others involved in the project
- Personnel management, in particular identifying the need for short-term assignments within the available budget, as well as planning and steering assignments and supporting local and international short-term experts
- Regular reporting in accordance with deadlines

Qualifications of the team leader

- Education/training (2.1.1): master-degree in informatic management or law or management
- Language (2.1.2): language proficiency in English
- General professional experience (2.1.3): 5 years of professional experience in the good governance system
- Specific professional experience (2.1.4): 5 years in anti-corruption system
- Leadership/management experience (2.1.5): 5 years of management/leadership experience as project team leader or manager in a company
- Regional experience (2.1.6): 3 years of experience in projects in Java (region), of which 2 years in projects in Indonesia (country)
- Development cooperation (DC) experience (2.1.7): 3 years of experience in DC projects
- Other (2.1.8): hold certificate on project management

Key expert 1: UI/UX Designer (1 person)

Tasks of key expert 1

- Conduct user research from the KPK, local governments, ministries, and institutions
- Create wireframes, mockups, and prototypes
- Design interactive and user-friendly user flows
- Create interactive and user-friendly web-based dashboard designs
- Conduct user testing from the KPK, local governments, ministries, and institutions

Qualifications of key expert 1

- Education/training (2.2.1): bachelor's degree on computer science/informatic technic/informatic management/communication visual design
- Language (2.2.2): language proficiency in English
- General professional experience (2.2.3): 3 years in web-design
- Specific professional experience (2.2.4): 2 years in governance web/application design
- Leadership/management experience (2.2.5): 2 years as team member of application development project
- Regional experience (2.2.6): 2 years as designer for national government level web/application
- Development Cooperation (DC) experience (2.2.7): 2 years in promoting good governance
- Other (2.2.8): skill on canva, figma and other design tools

Key expert 2: Data Engineer (1 person)

Tasks of key expert 2

- Design and develop data architecture

- Identify and connect internal data sources (such as MCP, corruption case data, corruption complaints, etc.) and external data (such as regional budget data, tender data, etc.).
- Develop data pipelines to clean, align, and combine data.
- Ensure data meets specified analysis requirements.
- Monitor data availability and ensure it is always up to date

Qualifications of key expert 2

- Education/training (2.3.1): bachelor's degree on computer science/informatic technic/informatic management
- Language (2.3.2): language proficiency in English
- General professional experience (2.3.3): 3 years in crawling API, ETL/ELT and data warehouse
- Specific professional experience (2.3.4): 3 years in using python dan tools Hadoop/airflow/pentaho/Elasticsearch/minio/s3
- Leadership/management experience (2.3.5): 2 years as data engineer of application development project
- Regional experience (2.3.6): 2 years as data engineer for national government level web/application
- Development Cooperation (DC) experience (2.3.7): 2 years in promoting good governance
- Other (2.3.8): skills on database PostgreSQL, MySQL dan MongoDB, query (sql dan no sql), API Gateway, Gitlab and docker, and rocky linux

Key expert 3: Data Scientist (1 person)

Tasks of key expert 3

- Identify the main objectives of the dashboard (e.g., mapping regional corruption risks, early detection of vulnerable areas, etc.)
- Determine priority use cases, such as regions with low MCP scores or sectors with high risk levels
- Define key indicators based on data available from internal and external KPK sources
- Develop analytical models to identify patterns and trends in regional corruption risks
- Mapping corruption vulnerability levels based on MCP indicators and other data
- Testing the analytical model to ensure data accuracy
- Conducting pilot tests in several local governments using real data
- Collect user feedback and refining the system

Qualifications of key expert 3

- Education/training (2.4.1): bachelor's degree on computer science/informatic technic/informatic management/stat/math

- Language (2.4.2): language proficiency in English
- General professional experience (2.4.3): 3 years in big data system development project
- Specific professional experience (2.4.4): 3 years in data management and big data analytic
- Leadership/management experience (2.4.5): 2 years as data scientist of application development project
- Regional experience (2.4.6): 2 years as data scientist for national government level web/application
- Development Cooperation (DC) experience (2.4.7): 2 years in promoting good governance
- Other (2.4.8): skills on data mining, analytic methodology and machine learning

Key expert 4: Business Intelligence Developer (1 person)

Tasks of key expert 4

- Identify and link internal data sources (such as MCP, corruption case data, corruption complaints, etc.) and external data (such as regional budget data, tender data, etc.)
- Develop analytical models to identify patterns and trends in regional corruption risks
- Map corruption vulnerability levels based on MCP indicators and other data
- Use **AI/Machine Learning** to improve the accuracy of predictions for high-risk regions
- Provide interactive data visualization features such as heatmaps, trend graphs, and risk maps
- Test analytical models to ensure data accuracy
- Conduct trials in several local governments using real data
- Collect user feedback and refine the system

Qualifications of key expert 4

- Education/training (2.5.1): bachelor's degree on computer science/informatic technic/informatic management/stat/math
- Language (2.5.2): language proficiency in English
- General professional experience (2.5.3): 3 years in interactive dashboard development (design and visualization and data)
- Specific professional experience (2.5.4): 3 years in data visualization using tableau, power BI, looker or click sense; cloud computing; and big data analytic technology
- Leadership/management experience (2.5.5): 3 years as BI developer of application development project
- Regional experience (2.5.6): 2 years as data scientist for national government level web/application
- Development Cooperation (DC) experience (2.5.7): 2 years in promoting good governance
- Other (2.5.8): skills on Hadoop, Apache Spark, atau Google Dataflow.

Short-term expert pool: Full-stack developers (2 persons)

Tasks of the Short-term expert pool

- Develop the backend for data processing and storage
- Provide interactive data visualization features such as heat maps, trend graphs, and risk maps
- Implement a role-based authentication and authorization system
- Ensure that the resulting dashboard has optimal performance so that it can be accessed quickly without delays or lag
- Conduct training on dashboard usage for users
- Develop operational guidelines and technical documentation
- Provide initial assistance in using the dashboard
- Ensure the dashboard continues to run optimally through system maintenance
- Develop additional features based on user feedback
- Adapt analytical models based on the latest trends in data
- Provide maintenance warranty until December 31, 2025.

Qualifications of the Short-term expert pool

- Education/training (2.6.1): bachelor's degree on computer science/informatic technic/informatic management/stat/math
- Language (2.6.2): language proficiency in English
- General professional experience (2.6.3): 3 years in web application development using PHP Lavarel /Phalcon/CodeIgniter/ Express
- Specific professional experience (2.6.4): 2 years in programming using PHP, HTML, CSS dan Javascript, including Skills on PostgreSQL, MySQL, MongoDB, query (sql and no sql), API Gateway, Gitlab and docker, VueJS / ReactJS, XML, JSON, rocky linux.
- Leadership/management experience (2.6.5): 2 years as full-stack programmer of application development project
- Regional experience (2.6.6): 1 years as full-stack programmer for national government level web application development
- Development Cooperation (DC) experience (2.6.7): 2 years in promoting good governance

Soft skills of team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Socio-cultural skills

- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking

5. Costing requirements

Specification of inputs

Fee days	Number of experts	Number of days per expert	Total	Comments
Team Leader	1	40	40	Output based
Designation of expert 1: UI/UX Designer	1	50	50	Output based
Designation of expert 2: Data Engineer	1	80	80	Output based
Designation of expert 3: Data Scientist	1	80	80	Output based
Designation of expert 4: Business Intelligence Developer	1	50	50	Output based
Designation of Short-term expert pool: Full-stack developers	2	80	160	Output based

The following basic calculations for the contract for works are a reference value based on the acceptance criteria for each partial work/milestone specified in Chapter 2 (Tasks to be performed by the contractor).

Since the contract to be concluded is a contract for works, we would ask you to offer your services at a lump sum price.

In addition, the assessment of the financial bid is also based on the underlying daily rate. Please also provide the underlying daily rate. A breakdown of days is not required.

6. Inputs of GIZ or other actors

GIZ and/or other actors are expected to make the following available:

- Logistics for workshops: provided by KPK
- KPK will provide computer devices that can be remoted by the Consultant through Anydesk (tools for remote computers) for online work on weekdays with assistance

from KPK (DMI and / or Korsup) but if the work is done in the Office / Onsite, the device will be loaned for work completion

- In addition, KPK will provide data that can be accessed by the Consultant in accordance with the applicable security standards at KPK. KPK will also provide tools for data processing according to the needs of the consultant.

7. Requirements on the format of the tender

The structure of the tender must correspond to the structure of the ToR. In particular, the detailed structure of the concept (Chapter 3) should be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). The tender must be legible (font size 11 or larger) and clearly formulated. It must be drawn up in English (language).

The complete tender must not exceed 8 pages (excluding CVs). If one of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment. External content (e.g. links to websites) will also not be considered.

The CVs of the personnel proposed in accordance with Chapter 4 of the ToRs must be submitted using the format specified in the terms and conditions for application. The CVs shall not exceed 4 pages each. They must clearly show the position and job the proposed person held in the reference project and for how long. The CVs can also be submitted in Bahasa Indonesia (language).

As the contract to be concluded is a contract for works, please offer a fixed lump sum price that covers all relevant costs. The price bid will be evaluated on the basis of the specified lump sum price. In addition, please also provide the underlying daily rate. A breakdown of days is not required.