

1.4 Project Organization

1.4.1 Introduction

1.4.1.1 The SEKD is a large-scale project with the construction period lasts for more than 13 years and covers an area of about 413 hectares. It is envisaged that there will be multiple construction contracts undertaking works concurrently on-site which is adjacent to or in close proximity to each other, cumulative impacts on nearby sensitive receivers are of major concern. It is indispensable to select a suitable type of EM&A management structure employed on site as it will definitely benefit the environmental performance of a project.

1.4.1.2 The SEKD composed of a number of development areas. Each major development areas covered a large area and the construction periods and durations are different. In view of this, a number of ENPOs (Environmental Project Offices) would be required to overview the environmental concerns from all the on-site activities during construction phase of each major development area. ENPO should therefore be established and in operation during the construction phases of each major development area to ensure compliance with EIA study recommendations and commitments and EP conditions, hence it is likely that the ENPO organisations will be required to be established in advance of the tender preparation phase of project implementation.

1.4.1.3 Based on the tentative works programs in **Table 1.2** and **Drawing Nos. 22936/IM/011A to 014A**, three ENPOs are recommended as follow:

ENPO A: KTA development package;

ENPO B: KTAC/KTTS development package with Trunk Road T2/Runway development on top;

ENPO C: KBR development package.

This would be tentative arrangement at this stage subject to refinement and the agreement of the Kowloon Development Office of Territory Development Department (TDD/KDO) and the Environmental Protection Department (EPD) during detailed design stage when actual project boundaries of various contracts will be known.

1.4.1.4 The ENPOs are to manage the cumulative construction impacts so as to ensure that the impacts arise are acceptable and in compliance with relevant environmental standards and guidelines. The ENPO system will not be extended to the operational phase of SEKD. Any operational phase EM&A requirements will be undertaken by the implementation agent identified within the Implementation Schedule (see **Appendix A**).

1.4.2 Role and Objectives of the ENPOs

1.4.2.1 Being the central coordination offices, the ENPOs provide an effective and proven mechanism for addressing and controlling potential cumulative impacts from multiple contracts. It shall be fully independent of the Contractors and works agents, reporting directly to TDD/KDO as the infrastructure proponent and keep EPD and all other project proponents and works agents informed. To be effective, the ENPOs must be suitably empowered, have influence over each of the Contractors working on site and be able to resolve disputes among different Contractors in a quick and effective manner. It is

envisaged that this will require the establishment of contractual obligations for each of the Contractors to implement the recommendations of the ENPOs.

1.4.2.2 The objectives of the ENPOs are as follows:

- To undertake all the monitoring and audit requirements defined in this EM&A Manual relevant to the development area of concern;
- To collect and maintain an up-to-date database of monitoring information from the development area of concern;
- To audit and interpret the environmental monitoring data and determine whether there is any non-compliance of the agreed environmental criteria. Whenever exceedances occur, appropriate remediation actions should be taken and ensure that the ameliorative measures are effective;
- To control pollution and reduce adverse environmental impacts and nuisances arising from works;
- To anticipate environmental problems by taking proactive actions before any severe impacts may arise;
- To identify the sources of environmental impacts from various sites when potential cumulative impacts may arise;
- To propose timely, cost-effective and practical solutions to problems through liaison with the site engineers, contractors and government works agencies;
- To ensure timely implementation of appropriate mitigation measures and ensure that the measures are effective;
- To audit the results by determining baseline pollution levels for the area and to set Action and Limit levels;
- To provide regular notification of existing or anticipated environmental problems via regular public consultation and liaison; and
- To assist the government in investigating and response to environmental complaints related to construction activities.

1.4.2.3 The roles and responsibilities of the various parties involved are described in following sections. The project organisation and lines of communication with respect to environmental protection works are shown in **Figure 1.1**. The roles and responsibilities of the various parties involved are described in following sections.

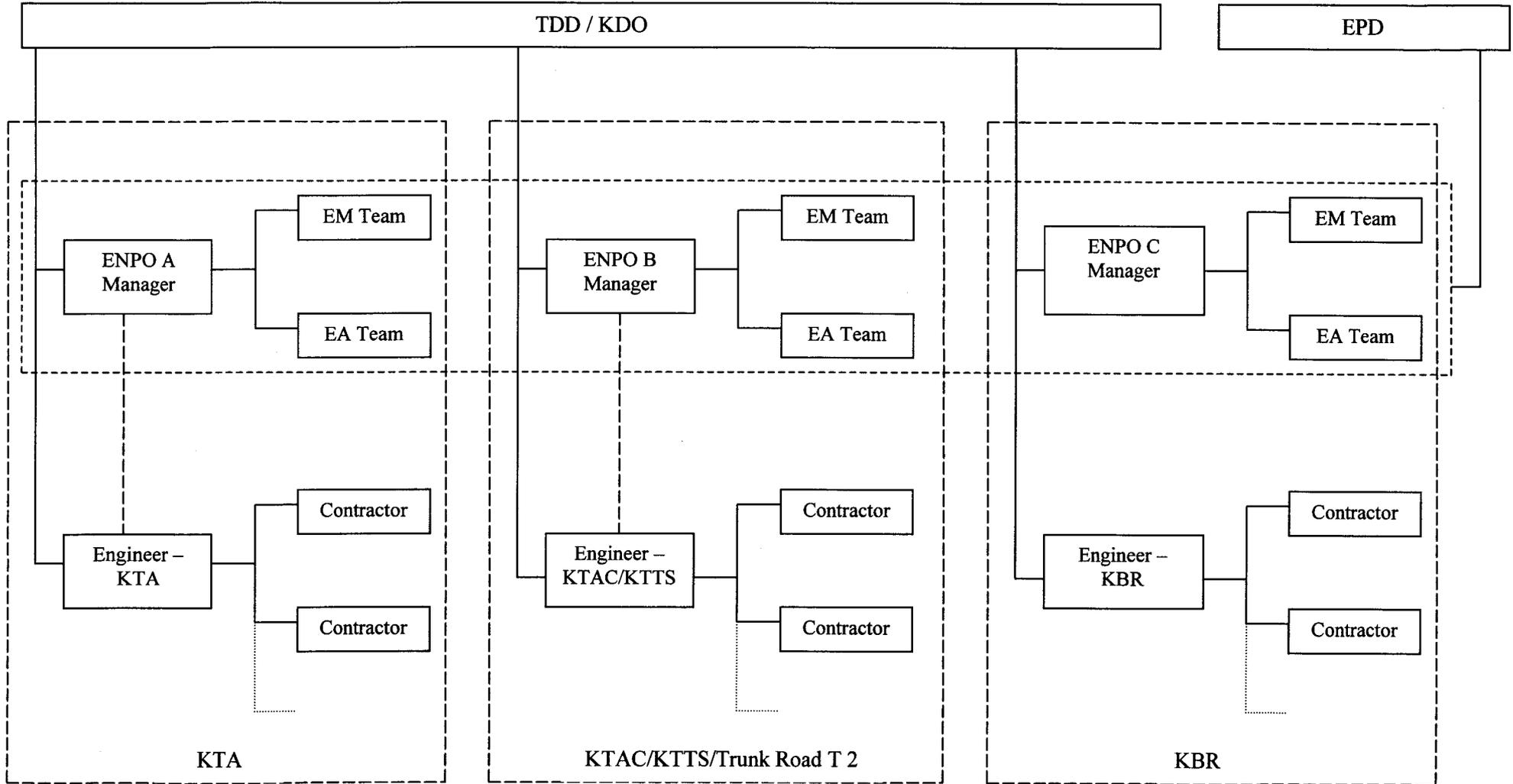


Figure 1.1 Project Organisation (EM&A)

1.4.3 Environmental Project Offices (ENPOs)

1.4.3.1 The ENPOs should be established and funded by the project proponent of this Project, Territory Development Department (TDD). The ENPOs should be reported directly to TDD/KDO as the infrastructure proponent and keep EPD and all other project proponents and works agents informed. In this Manual, “Engineer” should refer to the role undertaken by the “Engineer” and the “Engineer’s Representative (ER)” to monitor the works undertaken by the “Contractors”. “Contractors” should be taken to mean all construction contractors, and sub-contractors, working on site at any one time. The ENPOs and their staff should not be in any way associated with the Contractors. Staff of ENPOs should also not share the duties of the residential site staff (RSS) of the Engineer.

1.4.3.2 Under each ENPO, an Environmental Monitoring Team (EMT) and an Environmental Auditing Team (EAT) should be established to take up the responsibilities of environmental monitoring and auditing independently. An ENPO Manager, an EMT Leader, and an EAT Leader should be appointed to take up the overall management responsibility of the ENPO, EMT, and EAT respectively. The ENPO Manager, EMT Leader, and EAT Leader should have relevant professional qualifications, or have sufficient relevant EM&A experience subject to approval of the ER and the Environmental Protection Department (EPD).

1.4.3.3 The main responsibilities of the ENPO are:

- To coordinate, supervise, and manage the works undertaken by the EMT and EAT;
- To investigate and handle any complaints related to environmental nuisance received;
- To report to the Engineer, the EPD and the Client regarding the environmental monitoring and audit results, in particular, on compliance with the agreed environmental criteria, and on the general site environmental conditions and the implementation of mitigation measures resulting from site inspections;
- To provide specialist advice to the Engineer and Client on environmental matters to enhance environmental performance and on timely submission of all relevant EM&A works for approval by relevant parties;
- Liaison with ENPOs of other SEKD development areas on environmental issues;
- Timely submission of EM&A reports, summary reports; and
- To review the success of the EM&A programme.

Environmental Monitoring Team (EMT)

1.4.3.4 An EMT should be appointed to undertake all the environmental monitoring requirements for each of the proposed construction contracts. An EMT Leader should be appointed to plan and organise the implementation of the environmental monitoring program, and to ensure that the environmental monitoring is undertaken to the required standards.

1.4.3.5 The main responsibilities of the EMT are:

- To conduct sampling of various environmental parameters as required by this or subsequent revisions of the EM&A Manual; and
- To adhere to the agreed protocols or those in the Contract Specifications in the event of exceedances or complaints.

Environmental Auditing Team (EAT)

1.4.3.6 An EAT should be appointed to independently audit and interpret the monitoring data obtained by the EMT. The EAT should also be responsible for undertaking site audits / inspections to verify the overall environmental performance of the works, and for assessing the effectiveness of the EMT in their duties.

1.4.3.7 The main responsibilities of the EAT are:

- To review and analyse the environmental monitoring data obtained by the EMT;
- To assess the accuracy of monitoring data and verify them;
- To ascertain the validity of the EIA predictions;
- To audit the compliance with environmental protection clauses and relevant environmental standards and guidelines;
- To identify any adverse environmental impacts before they arise and anticipate environmental issues for proactive action before problems arise;
- To conduct regular site surveillance/inspections to check the implementation of the recommended environmental mitigation measures and determine the adequacy of these measures implemented;
- To inspect the Contractor's equipment and work methodologies with respect to pollution control and environmental mitigation and review construction programme; and
- To prepare audit reports on the environmental monitoring data and the site environmental conditions.

1.4.4 Contractors

1.4.4.1 The term "Contractors" should be taken to mean all Construction Contractors, and sub-contractors, working on site at any one time. Besides reporting to the Engineer, the Contractors should:

- Work within the scope of the construction contract and other tender conditions;
- Participate in the site inspections undertaken by the EAT, as required, and undertake any corrective actions instructed by the Engineer / ENPO Managers;
- Provide information / advice to the EAT regarding works activities which may contribute, or be continuing to the generation of adverse environmental conditions;
- Implement measures to reduce impact whenever Action and Limit Levels are exceeded; and
- Take responsibility and strictly adhere to the guidelines of the EM&A programme and complementary protocols developed by their project staff.

1.4.5 Engineer or Engineer's Representative

1.4.5.1 The term Engineer, or Engineer's Representative (ER), refers to the organisation responsible for overseeing the construction works and 'monitoring' the works undertaken by the various Contractors, and for ensuring that works undertaken by the Contractors in accordance with the specification and contractual requirements. The ER should:

- Monitor the Contractors' compliance with contract specifications, including the implementation of operation of environmental mitigation measures and ensure their effectiveness, and other aspects of the EM&A programme;
- Comply with the agreed Event and Action Plan in the event of any exceedance;
- Provide assistance to the ENPOs as necessary in the implementation of the environmental monitoring and auditing programme; and
- Instruct the Contractors to follow the agreed protocols or those in the Contract Specifications in the event of exceedances or complaints.