The HKIE's Views on the Impact of the EIA Ordinance on Infrastructure Projects

Having consulted the various engineering practitioners within the HKIE, we are pleased to offer our consolidated views as follows:

1. Across the diversity of engineering practices in Hong Kong, the consensus is in support of the Environmental Impact Assessment Ordinance, CAP. 499, S. 16 of 1998. As the Ordinance reads, it is there to "provide for assessing the impact on the environment of certain projects and proposals, for protecting the environment and for incidental matters". There is no doubt that Hong Kong, during the continuous process of infrastructure development, would require a robust system in place to ensure our infrastructure are implemented in an environmentally sustainable manner. By sustainable we purport this implies a collaborative approach both by the caretaker of the Ordinance and project proponents in their best endeavours to develop the much needed infrastructure of Hong Kong.

2. Upon less than 3 years of Ordinance enactment, we are concerned that the spirit of the Ordinance has been inadvertently biased towards the negative thoughts of seeking to veto environmentally sensitive projects rather than as a constructive quest for workable solutions to overcome environmental concerns. Although experience with the Ordinance is still at its infancy, we have already seen examples of political and worse still, legal confrontations between the green groups and project proponents, each fighting to the best of their abilities to win the battle yet having Hong Kong as the casualty of war. All these were done at great expense of time and financial resources to the community. There can be no winner in the end irrespective of which side one is on. Hong Kong needs not repeat the painstaking experience of other developed countries when seeking to comply with similar EIA Ordinance.

3. Analogous to the CIRIC report on construction reform in Hong Kong, we reckon that an element of partnering ought to be sought among the multitude of stakeholders when processing a project through the EIA Ordinance. This view is echoed by the Appeal Board in their judgement on the KCRC Spurline project, which reads

   The Ordinance gives the EIA process a legal structure. It is not a process which lies comfortably within a detailed legal framework. Much of its success depends therefore upon the manner in which it is implemented within the outline structure provided assisted by the Technical Memorandum. The consequence is that all involved are learning how best the various steps required can be implemented.

4. Hong Kong should learn from it with every stakeholder taking a serious look at the current process of implementing the EIA Ordinance. The HKIE expresses their concerns below and suggests appropriate measures be taken when effecting the statutory procedures, formulating the EIA study brief, and adjudicating the EIA report and environmental permit. Where applicable, these appropriate measures should be amplified in the Technical Memorandum on EIA Process.

5. Statutory Procedures and Implementation

5.1 We welcome the recent motion put forward to the Advisory Council of Environment (ACE) to consider embarking the EIA process before gazettals and resolving objections (if any) under other Ordinances such as the Roads Ordinance, Foreshore & Seabed Ordinance. This would be a great help to reduce the lead time for implementation of infrastructure projects.

5.2 Currently the EIA process stipulated in the Ordinance requires a comprehensive submission to cover both the construction stage impacts and the operation stage impacts. An option to facilitate the process would be to consider issuing environmental permits in stages. An initial stage permit can be issued to cover the less contentious construction phase to enable early commencement of site preparation works such as site formation. This has the benefits of allowing the more cumbersome EIA process on the operation phase (e.g. population intake) to be dealt with during the time slot for detailed design of the works.

6. Designated Projects

6.1 Schedule 2 & 3 of the EIA Ordinance explicitly provides for certain projects as *Designated Projects* requiring adjudication. The definition and categorization of Designated Projects are probably as clear as it could be for the purpose of the Ordinance but would inevitably be opened to interpretation. We challenge the wisdom of seeking to prescribe under the Ordinance *Designated Projects* by the nature of works and scale of construction (e.g. channel wider than 100m, dredging more than 500,000 cu m), rather than by the sensitivity of the impacts a project may have on the environment. We believe an answer to our challenge has to be "one wouldn't get to know until an EIA report is done" or " it's probably better, if not safer to have a broader yardstick in place than none". Whilst we concur there does not appear to be a workable alternative to our challenge, we consider the Ordinance should at least provide for a fair and reasonable mechanism to adjudicate the special circumstances pertinent to a project. The current practice of relying on the comments by the public and the ACE may not be sufficiently representative of the needs of the general public at large.

6.2 For instance some engineering works like the Landslip Preventive Measures (LPM) currently fall outside the definition of *Designated Projects* and are therefore exempted from the EIA process. It is imperative to maintain the on-going practice to avoid jeopardising Hong Kong's ability to combat landslip risks to public in a time and cost effective manner. In short, when confronted with situation of *loss of lives/property* vs *probable environmental well being*, perhaps it wouldn't be too difficult for law maker or enforcer to make the right executive decision.

7. EIA Brief

7.1 A clear, unambiguous EIA brief is instrumental to quality EIA reporting and hence, the analysis and processing of effective mitigation measures to sustain projects. This is particularly the case where sensitive ecosystems or habitats may be affected thus requiring a full year (i.e. 4 seasons) of baseline monitoring. Current EIA brief provided by the EPD is usually as broad in scope and study areas (both topical and geographical) as it could possibly be, lacking the guidance or sometimes foresight on strategic key issues for the project proponent to follow. The hesitation to provide a genuinely customised EIA study brief undoubtedly serves the purpose of avoiding recourse to the brief drafter in the event of any unaccounted for issues which may be brought to light during the ACE or public consultation. However, the downside is project proponents and their executing agents are often at loss when asked to follow a exceedingly meticulous brief, not to mention their subsequent wild-goose chase for the multitude of findings needed in the EIA report.

7.2 We attribute this to the diversity and variety of environmental science, and hence, the difficulty faced by the caretaker of the Ordinance to exercise a pragmatic judgement on what is practical and reasonable. For instance, expertise in ecology resides in the Agriculture Fisheries & Conservation Department (AFCD) whereas those related to air, noise, water, waste etc. are vested in different specialist groups within the Environmental Protection Department (EPD). The current practice is for the responsible EPD officer to coordinate and assemble their requirements without necessarily formulating a reasoned opinion of his own, thus resulting in an overly meticulous study brief. Similarly, the study areas stipulated in the EIA brief are often unnecessarily exaggerated, rendering it impractical to complete the EIA report swiftly within the time and resource constraints of the project.

8. EIA Report

8.1 Other than a meticulous EIA brief, current procedures promulgated under the Technical Memorandum require much in-depth engineering details be furnished in the EIA report when the project is still at its feasibility/investigation stage. For some engineering works, details such as dredging/filling methods for reclamation, or types/methods of piling for foundation have to be specified. This has in some cases led to pre-emptive measures being proposed for approval to meet the tight project programme. It often proves to be very time consuming to make revisions later when many “material changes” are found necessary upon commencement of detailed engineering design.

8.2 The consensus among engineering practitioners points to deficiencies in adjudicating the EIA process such as

- subjective (and sometimes ambiguous) performance indicators and acceptance criteria on ecology, cultural heritage and visual impacts. Currently economy of works, construction difficulties, maintenance problems carry little weight in the

adjudication of noise mitigation measures. If the emphasis is not re-focused, some expressed concerns that Hong Kong may ultimately become a city of noise barriers, enclosures or tunnels;

- change or uncertainty in landuse alongside a road project cause much disruption to the findings of the EIA report. For road or rail projects, what is meant by *"practical and reasonable alternatives"*? Who should decide what is a *"practical and reasonable"* and yet viable alternative which could strike the balance of engineering, socioeconomic and environmental merits? This potentially leads to indefinite amount of works in the pursuit of a satisfactory EIA report;

- cumulative and consequential effects of both on-site and adjacent developments. It is not always possible to ascertain the environmental impacts to or from existing and future planned developments due to confidentiality or lack-of-planning reasons. Provisions made for "planned development" could be rendered abortive and wasteful particularly if there is no definite design or committed programme for the affected developments;

- uncertainty in the exact extent of EIA study and findings. In the Technical Memorandum one often come across abstract terms like "avoid to the maximum practical extent", "best practical mitigation measures" etc. In the Spurline appeal case the Appeal Board pointed out that the Technical Memorandum is lengthy and is usually expressed in very general terms, and *"it is daunting for the Director [of EPD] to apply the process, and equally daunting for the proponent to comply with it"*;

- the abbreviation IUCN in Technical Memorandum Annexe 16 has no definition.

8.3 To alleviate the expressed concerns, it is the engineering practitioners' views that regulations referred to in EIAO 32(1)(d) should be issued as a matter of urgency, namely

(a) detailed criteria and standards used by the Director in granting or refusing an environmental permit referred to in EIAO section 10(2);

(b) the mechanism for the Director to resolve conflicting opinions from the public, ACE and other Government Departments effectively and efficiently;

(c) a clear definition of material change is needed as there are a number of grey areas in EIA Ordinance allowing subjective interpretation by individual EPD officers. In many cases, it is unclear about what constitutes a material change that would require revision to the Environmental Permit. For instance, introducing an environmental friendly construction waste recycling plant in a construction site could, in its strictest sense, be viewed as a material change. The need to go through the EIAO process will deter the use of such environmentally friendly initiative in a construction site where the air and noise

modelling alone are sufficient to gain environmental acceptance. With the Environmental Permit a legal document, the ambiguities there should be eliminated to avoid potential delay to infrastructure projects;

(d) the breadth and depth of detailed information required, bearing in mind that detailed engineering designs are not always performed during the EIA report stage;

(e) according to EIAO 32(1)(b), the Secretary (for Environment and Food) may prescribe the minimum qualification and experience of persons undertaking EIA studies. Such prescribed minimum qualification and experience should be published as soon as possible. The prescribed qualification and experience may be extended to cover the Applicant's Authorised Professional Representative (AAPR) and the EPD officers who is handling the applications.

9. Public Consultation & Statutory Control

9.1 It is worth noting that a major infrastructure project would inevitably cause some changes to the environment, and some residual impacts to the environment and ecosystem are intangible. Pursuing the higher goals on ecological balance could sometimes either deter the essential projects or incur excessive costs. What is an optimum cut-off level? The public shall be regularly briefed on these issues, and an overall strategy well received by interested parties should be developed based on this principle and the willingness-to-pay concept.

9.2 EPD will undoubtedly take into consideration the public opinion and views from ACE, LegCo and green group etc, before deciding to grant an Environmental Permit. Since it is impractical to devise a comprehensive set of procedures and definitive criteria for resolving conflicting views, the role and authority of Government officials (e.g. EPD, AFCD) cannot be over-emphasised. Equally important is the Applicant's Authorised Professional Representative (AAPR), who should be skillful enough in handling conflicts and in building community consensus. Their necessary credentials should be clearly defined, as they are key persons who need to contribute positively to avoid undue delay to major infrastructure projects. Furthermore, to ensure compliance with the recommendations and conditions in the Environmental Permit, the AAPR should be responsible for the follow-up actions in the Environmental Permit. A statutory control is therefore recommended.

9.3 Similarly, the present control of environmental monitoring and audit personnel, if any, is considered not adequate to

- upkeep the quality, and
- ensure maintenance of professional code of ethics.

A statutory control is also recommended.

9.4 Lastly on the administration side there should be improved coordination and inter-departmental consultations among Government and with public bodies on related environment issues.

In summary, it is our members' views that the current EIA Ordinance and Technical Memorandum have much negative impacts to the infrastructure projects in Hong Kong. Whilst we are supportive of the genuine intent of the Ordinance, more works need to be done to avoid having an Ordinance to shoot ourselves in the foot. The ability and more importantly, commitment by the caretaker of the Ordinance to exercise executive discretions and considerate thinking from time to time are short-term measures to rectify the situation. We look forward to seeing an overhaul of the Technical Memorandum as soon as possible to guide the EIA process.