## Submission on Studies related to artificial islands in the central waters to the

## Legco Panel on Development

- 1. Past experience shows that failure to follow the necessary and proper steps in the implementation of a project leads to delays and cost overruns. The proposals set out to upgrade the 768CL project (studies related to artificial islands in the central waters) to Category A fails to follow the established necessary steps for project implementation with the likely result of a repeat of the high cost and programme overrun on the High Speed Rail project. In that project, construction commenced before site investigation and design were sufficiently complete; this was a failure to respect the separate stages of a project whereby the results from an earlier stage provides the essential input into the later stage. If the proposals as set out for the artificial islands in the central waters are followed, there is every likelihood of a repeat of these issues.
- 2. Past procedures, established by the Works Branch some 25 plus years ago, introduced the Preliminary Project Feasibility Study (PPFS) whereby the key aspects of a project were verified before the project could be upgraded. In this way any issue which might prevent the project smoothly proceeding to completion was identified at an early stage thus avoiding wasted time and costs of the next stages. It is apparent that no such comprehensive check has been undertaken for the artificial islands in the central waters.
- 3. The first given component of the proposal to upgrade 768CL is a detailed engineering study, while the second component is a transport infrastructure study. The results of this second component form essential inputs into the first. The proposal to complete the studies in 42 months clearly indicates the need for concurrent studies for the detailed engineering study and the transport infrastructure study. This is a totally unreasonable time span and cannot be met if the various studies are to be consistent.
- 4. The essential input parameters for the detailed planning and engineering study have not yet been established. Many of these will come from the area-wide transport study which is to cover the priority road and rail links, including the possible road and rail links for the longer term, between the Hong Kong Island, the artificial islands in the Central Waters, Lantau and coastal areas of Tuen Mun. The engineering feasibility and preliminary design of these priority road and rail links cannot be undertaken before the links, and their required capacity, have been determined by the area-wide transport study.
- 5. Paragraph 13 of Enclosure 1 to the Paper to the Panel states "It is proposed that these components (the Planning and Engineering and the Transport Infrastructure Study) be taken forward in parallel as far as possible". Such a proposal is inviting abortive work, additional costs and programme delays and Legislators are recommended to reject such a proposal in favour of the orderly staged approach which has stood Hong Kong in the forefront of providing infrastructure in the past.
- 6. A Preliminary Traffic and Transport Impact Assessment (TTIA) was undertaken under Agreement No. CE 11/2005 (HY) (Technical Study on Transport Infrastructure at Kennedy Town for Connecting to East Lantau Metropolis). The report on this assessment noted that the proposed highway infrastructure from the North West New Territories (Tuen Mun) to Hong Kong Island (Kennedy Town) via the East Lantau Metropolis did not have sufficient capacity for the full proposed development. It recommended consideration to increasing the highway capacity (noting that this was not possible for the Hong Kong Island connection), reducing the East Lantau Metropolis development, additional highway links to the existing developed areas, and high tolls to discourage traffic.

- 7. Michael Wong Wai-lun, the Secretary for Development, ignored the report's recommendations in his press conference for the Lantau Tomorrow on 19 March, even suggesting an increase in development from that assumed in the preliminary assessment. He gave no indication of the need for additional highway links or the need for high tolls which would need to increase each year in line with inflation if they were to remain effective in discouraging traffic. In place he was recommending early engineering feasibility studies before essential input for these studies was available from the necessary transportation and other studies.
- 8. The Civil Engineering Development Department is refusing to release the full report on the Preliminary Traffic and Transport Impact Assessment citing "confidentiality". It is inappropriate that Legislators are now being asked to vote funds to upgrade a project when they are being denied essential information they need to help them form a proper judgement.
- 9. Robust and secure transportation infrastructure with sufficient capacity is vital for this new town given its location in the middle of the sea with a 700,000 population (more than Shatin) especially during severe weather conditions as experienced in Hong Kong.
- 10. Legislators should insist that the project be undertaken in defined stages such that the results from the earlier stages can be used as input into the subsequent stages thus avoiding the need to make unverified assumptions. The use of such unverified assumption will only lead to abortive works, increased costs and delays which have been seen on other recently badly managed projects.
- 11. Legislators should only agree to funding for the proposed "area-wide transport study covering the priority road and rail links as well as the possible road and rail links for longer term, between the Hong Kong Island, the artificial islands in the Central Waters, Lantau and coastal areas of Tuen Mun".
- 12. This area-wide transport study should build upon the Preliminary Traffic and Transport Impact Assessment, which has already been undertaken. The aim of the area-wide transport study must be to produce a set of transport infrastructure links, including existing links, which have sufficient capacity for the proposed developments. These must include those developments in the New Territories, particularly in the North West New Territories, as well as those proposed on the artificial islands. Such a transport study may have to adjust the sizes and type of the proposed developments to develop viable options and it may also have to consider additional strategic links, additional to those currently shown on the plans for the artificial islands.
- 13. It will also need to consider the upgrading of existing transport infrastructure to ensure sufficient capacity and how the proposals impact on existing traffic flows and movements. In particular the study must address the highway corridor between Kennedy Town and Central where earlier studies have shown that it does not have sufficient capacity to cater for a dual three lane tunnel from the artificial islands.
- 14. Consideration must also be given as to how the currently proposed rail links to the artificial island are to extend beyond their currently proposed landing points at Kennedy Town, Mei Foo and Ka Loon Tsuen.
- 15. While the transportation study will have to consider preliminary feasibility of the proposed links and upgrading of existing links, it is only when this study is complete, and its conclusions and recommendations agreed, is it appropriate to commence the detailed planning and engineering study for the artificial islands and the full engineering study on the feasibility of the priority road and rail links. Any earlier commencement would be inviting abortive woks with subsequent additional costs and delays.

- 16. Completion of this area-wide transport study, including all the consultations and approvals necessary to complete the final reports, could be expected to take almost 42 months, thus the timescale Enclosure 1 to the Paper to the Panel is unrealistic.
- 17. Once the area-wide transport study is complete it would be then, and only by that time, appropriate for the project upgrade to undertake the detailed planning and engineering (P&E) study for the artificial islands around Kau Yi Chau (KYC Artificial Islands) as set out in the paper.

Ronald Taylor MBE TD ED MA MSc DIC CEng MICE MIHKE

31 March 2019