Relevant Extract of Further Questions and Comments from Members and Response by the AAHK
(Subsequent to the Supplementary Information provided by AAHK on 4 November 2016) as circulated to Members on 16 December 2016

Expansion of Hong Kong International Airport into a Three-Runway System
Report on the Effectiveness of the Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (SkyPier HSF Plan) on Chinese White Dolphins (CWD) and the Coral Translocation Plan – Supplementary Information

Comments and Responses

Enquiries and comments from ACE Members	Further Response provided by AAHK
A. "Prevailing Speed" in SkyPier Plan	
Comments from Dr Hung Wing-tat If it is average speed, it is not wise to "create" another term that confuses the readers. Can AAHK quote examples where "prevailing speed" is used for any transport mode in any project? "Prevailing speed" is NOT what the EIASC's concern throughout the discussion. We concern cases whereby the HSF exceeds the speed limit of 14 knots. Therefore, we concern the instantaneous maximum speed of any HSF crossing the control zone. I am unhappy that AAHK uses the self-created term "prevailing speed". It appears to me that the use of this self-created term is to confuse ACE members. Can you request them to delete the presenting of "prevailing speed"? Instead, they should report the instantaneous speed and	The term of "prevailing speed" refers to the average speed of HSFs recorded within the speed control zone (SCZ). To avoid confusion, we will change the term to "average speed" in the upcoming EM&A report from November 2016 onwards. In addition to the average speed information, the cases of instantaneous speeding within the SCZ have also been reported in the Monthly EM&A Reports already, which are made available for public information on the 3RS dedicated website. The EM&A Report will continue to report both the average speed and instantaneous speed information as part of the audit programme.

report cases of exceedance of speed limit in the control zone.	
Comments from Dr Billy Hau The "prevailing speed" is confusing and not helpful at all in this matter. May I suggest that we ask AA to drop this in future reports and we focus on the instantaneous speed and exceedance?	
B. Comparison of the CWD Data Collected after the Implementation of the SkyPier Plan	
Comments from Dr Billy Hau: Here are my comments and further questions on the supplementary information (I have replied earlier on the "Prevailing speed" problem". Here I focus on the dolphin survey: 1. Figure 2 provided the instantaneous speeds of diverted Sky Pier HSF within the SCZ, which is much more useful than the prevailing speeds. There are numerous cases of violation with speed over 20 knots or even 25 knots, and more surprisingly the situation of such violations did not improve even in recent months. I wonder whether AAHK has imposed any penalties to these violations after the "grace period" as the operators should get used to this new implementation of traffic scheme by now. Also, even more surprisingly there are many occasions that the boat speeds were under five knots, and some even at zero knots. Can AAHK explain why the boat has to slow down to such extent or even stop within SCZ? Also, their	It is worth mentioning that the speed of HSFs is influenced by various factors including marine current and the presence of vessels nearby. Nevertheless, each of the instantaneous speeding cases and average speeding cases were investigated by the Environmental Team with their Marine Specialist and checked by the Independent Environmental Checker with their Independent Marine Specialist. Up to now, all cases of instantaneous speeding were due to navigation or public safety reasons. The exceedance case that was attached to the supplementary information with instantaneous speeding to over 20 knots was due to the need for acceleration in order to maneuver around a large marine vessel in front of the HSF, as explained by the ferry operator, with log records to support this. Should there be repeated speeding by the same skipper without reasonable justification and rectification, further action such as suspension of relevant ferry schedules will be considered by us. We sometimes observed HSFs slowing down or even stopping within the SCZ for very short durations for example to give way to other ferries. Speed might also sometimes be deterred by the countercurrent. These data of ferry speeds 5 knots or below contributes to only 0.72% of the total number of AIS data point collected between March and August 2016. As regarding the enquiry on the reason for not setting the speed restriction at 10 knots,

claim that a speed limit of 10 knots is not feasible during the EIA stage, is quite contradictory to what was shown in this figure, that the boats often slow down to under 10 knots.	we explained at the 216th ACE meeting held on 5 September 2016 that ferries would have to travel at a speed a few knots below the speed limit in order to ensure compliance with the speed limit, i.e. 6 to 7 knots on average if the speed limit was set at 10 knots, and there were safety concerns associated with ferries operating at such a low speed (e.g. difficult in maneuvering and cause uncomforted to passenger). This can be referred to para. 11 of the meeting minutes.
2. In response to question (ii), there are several queries: - AAHK claimed that the AFCD monitoring has shifted the focus toward the western and southwestern waters of Hong Kong in recent years, and therefore AFCD data was not used for evaluation. In the AFCD report, in the past four years, according to the reports on line, all analyzed results utilized the combined dataset from BOTH AFCD and HZMB monitoring to provide a more complete picture, so any results from AAHK should be directly comparable to what the AFCD monitoring report has presented. I am still not convinced that the AFCD data is not comparable. - AAHK decided to use the two 6-month sets of HZMB CWD monitoring data (Jan-Jun 14 and Jan-Jun 15) to compare with the 3RS CWD monitoring data in Dec15-Jun16, to determine whether there is any decline in dolphin abundance in NWL. First, they have already acknowledged in ACE meeting that their survey team is different from HKCRP, and the latter is responsible to conduct both AFCD and HZMB monitoring surveys. In order to allow a fair and	The analysis of AFCD data was based on 12-month periods allowing consideration of temporal and spatial changes in distribution and abundance in monitoring survey areas, while the data analysis of 3RS CWD baseline monitoring data was based on only 6-month of data collection. To have a more representative comparison, the 3RS project will conduct an annual review with the AFCD long-term monitoring report analysis, in which a larger sample size for the 3RS data will be available to facilitate consideration of seasonal variation over a whole year and to enhance the precision of the analysis. AAHK intends to report back to the ACE on completion of the review and analysis of data from a full year. The analysis conducted so far is preliminary as it is based only on monitoring data from the first 6-month periods after the HSF route diversion came into effect. We have limited data after only six months, but do plan to address these concerns once a full year of data is available in 2017 (i.e. a full year of data is available after commencement of the SkyPier HSF route diversion and speed control). The supplementary information analysis presented the preliminary findings of CWDs abundance, which are different from the encounter rates. Based on the 3RS project CWD Baseline Monitoring Report a declining trend in the encounter rates prior to the commencement of 3RS marine works construction was also recorded. It has been

more meaningful comparison of data in 2014-2016 to deduce dolphin abundance for the sake of consistency, AAHK should not only use their own data in 2016, but must use the Jan-Jun 16 data collected for HZMB as well. This is a major issue. I have consulted Dr. Samuel Hung on this point, according to his preliminary analysis based on the three periods of Jan-Jun14, Jan-Jun15 and Jan-Jun16 based on only HZMB data, the encounter rates of dolphin have declined from 19.2 in 2014, to 7.4 in 2015 and 4.7 in 2016 in NWL, so there were further drop in 2016, contrary to what AAHK has trying to present. This highlights the need to look at all data available.	emphasized in the supplementary information that further examination of abundance will be made when more data are available from the ongoing vessel line-transect work effort along with more data from the land-based and passive acoustics monitoring survey methods that are also being collected in our ongoing monitoring. The "conclusion" we made is simply a statement of the results of our preliminary analysis that has had to make use of only 6-month data. We have repeatedly stated that there are currently not enough data covering a long enough time period to reach more definitive conclusions. Further examination of CWD density and abundance will be undertaken when a full year of vessel transect data is available from 3RS CWD line-transect surveys in combination with further examination of land-based surveys and PAM (Passive Acoustic Monitor) survey datasets.
- Secondly, the preliminary conclusion that there is an increase in dolphin abundance in 2016 is simply premature, as the CV% in Jan-Jun 2016 for NWL shown in Table 2 is 51.5%, which was much higher than the one in 2014 (19.8%) and 2015 (33.9%) for the same area. They should refrain from repeatedly stating that the number of CWDs increased slightly in NWL during the first 6 months of the HSF re-routing and speed restriction in 2016, as this is simply an erroneous statement and can be very misleading.	Matching up photo-identified CWD individuals between two different photo-id catalogues is a challenging task requiring very careful comparison of thousands of photos between two different photo-id catalogues. This is not practicable as there is currently no ready and comprehensive access to the CWD photo-id catalogues held by different parties.
- Finally, the dolphin abundance information reflects the entire NWL survey area, but not on what's going on with SCZ, so AAHK has not provided any answer to the question being asked in (ii). There must be a differentiation between	

the dolphins recorded in the SCZ and the rest of NWL.	
3. In response to question (iii), only two out of the 29 individuals occurred in SCZ, which is quite a surprise. Throughout the entire document supplementary information, AAHK has avoided the issue of what's going on in SCZ in terms of dolphin occurrence, and this only piece of relevant information has shown that most individual dolphins have avoided this area. As the ID individual by AAHK can be matched up easily with the AFCD long-term photo ID dataset, information should be presented whether these 29 individuals have previously used the SCZ in the preceding years, to draw some conclusion on whether these individual dolphins are affected by the diverted traffic scheme. I hope these further queries and comments could be forwarded to AAHK and I would expect their replies on these.	As regards the concern of small number of individuals recorded within the SCZ, it should be noted that the length of transect lines within the SCZ is much shorter than the length of the remaining transect lines in the rest of the NWL survey area outside the SCZ. The probability of recording dolphin sightings within SCZ is correspondingly very likely to be lower than the probability of sighting CWDs in the comparatively much larger area of the NWL survey area outside of the SCZ. The information presented in the supplementary information is not comprehensive, and was only presented to provide a summary of the kinds of analyses that are being worked on in lieu of the larger datasets being available in the coming months. Proper analysis of the issues and questions that are being raised requires a more comprehensive assessment of more forthcoming data. As stated, we plan to further examine and analyze CWD density and abundance data when a full year of data is available for the analysis. We will assess, as best we can with all of the data available to us, the issue of dolphin use of the SCZ both before and after the SkyPier HSF route diversion and speed control arrangements were put in place. Having a full year of data available after the establishment of the SCZ is necessary in order to provide a more robust analysis and more reliable results.

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