



30 March 2009

Our ref: *Site Inspection Report.doc*

Dear Sir or Madam,

**Environmental Impact Assessment (EIA) Ordinance, Cap 499**  
**Project title: VSNL Intra Asia Submarine Cable System – Deep Water Bay**  
**(Environmental Permit No. EP-294/2007 & FEP-01/294/2007)**

***Site Inspection Report***

ERM-Hong Kong Ltd (ERM) is pleased to submit the Site Inspection Report for the monitoring period, from 16 March to 22 March 2009, for the above captioned project for your review.

The following Sections provide details of the project background and the observations recorded during the site inspection.

**1. Background**

Tata Communications (Bermuda) Ltd (formerly Videsh Sanchar Nigam Limited (VSNL)) proposes to install a submarine telecommunications cable, which will run from Deep Water Bay and through southeast Hong Kong offshore waters. The cable landing site will be at the western edge of Deep Water Bay beach at an existing cable landing manhole location. From Deep Water Bay, the cable will extend southwards towards the East Lamma Channel. Near to Round Island, the cable will turn approximately parallel to the East Lamma Channel passing to the south of Po Toi island. The cable will then run eastward close to the boundary of HKSAR waters and then out beyond Hong Kong territorial waters into the South China Sea. At the southeast offshore waters, it will be necessary to install a grout mattress to protect the cable where it crosses Hong Kong Electric Co., Ltd' s (HKE) gas pipeline. A map of the proposed cable route is presented in *Figure 1.1*.

In August 2007, a Project Profile (PP) for the Project included an assessment of the potential environmental impacts associated with the installation of the submarine cable circuit was prepared and submitted to the Environmental Protection Department (EPD) under *section 5.(1)(b) and 5.(11) of the Environmental Impact Assessment Ordinance (EIAO)* for application for

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Permission to apply directly for Environmental Permit (EP). The Environmental Protection Department, subsequently issued an Environmental Permit (EP-294/2007) and Further Environmental Permit (FEP-01/294/2007). Amendments to the permitting requirements were incorporated into Environmental Permit to address potential environmental impacts associated with cable crossings over the HKE's gas pipeline in southeast Hong Kong waters. Under the requirements of *Condition 3* of the EP, an EM&A programme as set out in the *Environmental Monitoring and Audit Manual (EM&A Manual)* is required to be implemented. In accordance with the *EM&A Manual*, a weekly site inspection should be undertaken at the Deep Water Bay Beach until the completion of construction works at the landing point. Details of the compliance audit procedures are presented in *Section 7* of the *EM&A Manual*.

The construction works for the VSNL Intra Asia Submarine Cable System commenced on 16 March 2009.

## **2. Construction Works Undertaken During the Reporting Week**

A summary of the major works undertaken during the reporting week is shown in *Table 1*.

**Table 1 Summary of Marine Works Undertaken During the Reporting Week**

<b>Date</b>	<b>Works Area</b>	<b>Activity</b>
16 March 2009	Beach	Cable anchoring in the manhole, trench excavation and burial of cable simultaneously. Backfilling and reinstatement of beach area.
	Near shore	Preparation works and installation of articulating pipes by divers.
17 March 2009	Beach	Reinstatement of beach area.
	Near shore	Diver hand jetting and burial of cable simultaneously (within a cage-type silt curtain).
18 March 2009	Beach	Beach levelling and reinstatement. Demobilisation of beach equipment and hoardings from the site.
	Near shore until 100m from the shore (as per LCSD's request)	Diver hand jetting and burial of cable simultaneously (within a cage-type silt curtain).
19 March 2009	Near shore before entering Zone A	Diver hand jetting and burial of cable simultaneously (with silt curtain), approximately 30-50m per day subject to the seabed conditions.
20 March 2009	Near shore before entering Zone A	Diver hand jetting and burial of cable simultaneously (with silt curtain), approximately 30-50m per day subject to the seabed conditions.
21 March 2009	Near shore before entering Zone A	Installation of articulating pipes by divers.
22 March 2009	None	None

### **3. Observations**

A site inspection was carried out at the Deep Water Bay Beach on 16 March 2009 and the site was generally in good orderly manner. The inspection log sheets are shown in *Annex A* and the photographic records of the site, taken on 16 March and 18 March 2009, are presented in *Figures 1.2-1.6*.

No non-compliance events were recorded during the reporting week.

No complaints and summons/prosecution were received during the reporting week.

No follow-up action/mitigation measures were required during the reporting week.

***Figure 2.2 General view of the Construction Site (16 March 2009)***



***Figure 3.3 Trench Excavation and Backfilling (16 March 2009)***



**Figure 4.4 Installation of Articulating Pipes (16 March 2009)**



**Figure 5.5 Cage-type Silt Curtain (18 March 2009)**



**Figure 6.6 Restored Beach Area (18 March 2009)**



#### **4. Future Key Issues**

The beach cable landing works were completed on 18 March 2009 and hence, the site inspection will be suspended but the monitoring team will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

During the following weeks (23 March to 29 March 2009), the construction activities will involve preparation works outside Zone A and the diver hand jetting works will enter Zone A on 25 March 2009. The Impact Water Quality Monitoring will take place in Zone A accordingly.

Should you have queries on the Site Inspection Report, please do not hesitate to contact the undersigned or our Joanna Kwan at 2271 3303.

Yours faithfully/ sincerely  
For ERM-Hong Kong, Limited



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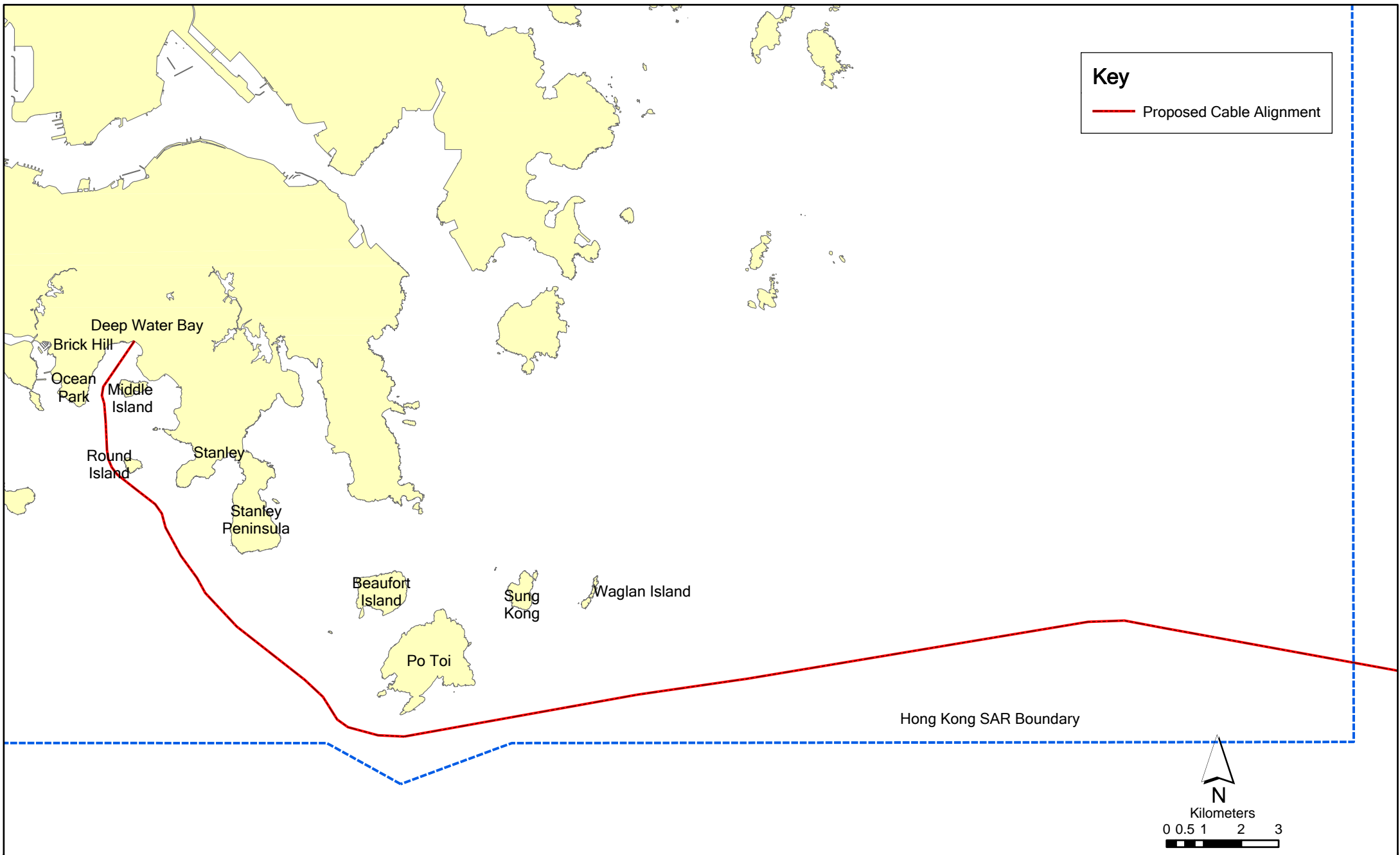


Figure 1.1

The Route of the Proposed Cable System

Annex A Site Inspection Log Sheet

Site: Deep Water Bay Beach Inspected By: Terence Fong (ERM)  
Joanna Kwan (ERM)

Inspection Date: 16-Mar-09 Time: 3:45:00 PM

**Weather**

**Condition**  Sunny  Fine  Overcast  Drizzle  Rain  Storm  Hazy

**Temperature** 20 °C **Humidity**  High  Moderate  Low

**Wind**  Calm  Light  Breeze  Strong

**A Noise**

	N/A or not observed	Yes	No	Photo/Remarks
A1 Are all plant and equipment well maintained and in good operating condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
A2 Is idle equipment turned off or throttled down?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
A3 Are powered mechanical equipment covered or shielded by acoustic materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
A4 Are silenced equipment used where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
A5 Do mobile plants be sited as far away from NSRs as possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
A6 Do plants known to emit noise strongly in one direction be oriented away from nearby NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
A7 Major noise source(s) <input type="checkbox"/> Traffic	<input checked="" type="checkbox"/>	Construction activities inside of site		
<input type="checkbox"/> Construction activities outside of site	<input type="checkbox"/>	Others _____		
A8 Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Annex A Site Inspection Log Sheet

**B Water Quality**

	N/A or not observed	Yes	No	Photo/Remarks
B1 Is drainage system adequate? Are there temporary ditches for runoff discharge into appropriate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B2 Watercourse?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B3 With silt retention pond?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B4 Do permanent drainage channels have: sediment basin?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B5 traps and baffles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B6 Are there sediment tanks for settling runoff prior to disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B7 Are there oil interceptors in drainage system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B8 Oil and grease removed regularly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B9 Bypass to prevent flushing during periods of heavy rain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B10 Is drainage system well maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B11 Is exposed earth stabilized after earthworks have been completed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
B12 Are exposed slope surfaces covered (by tarpaulin or other means)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B13 Are open stockpiles of more than 20 m <sup>3</sup> covered during rainstorm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B14 Are manholes covered and sealed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Work in process
Rainy Season				
B15 Drainage system adequately designed for storm flow?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B16 Sediment control measures inspected and maintained after rain storms?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B17 Is debris and rubbish on site collected and disposed of properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
B18 Is wastewater discharge license available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B19 Measures to prevent the washing away of sand/silt to drains?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B20 Is there any sediment plume observed existing the marine works area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
B21 Are there any marine works within 200 m of the Deep Water Bay Beach during the peak bathing season (April to October)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____



Annex A Site Inspection Log Sheet

**C Environmental Complaint**

C1 Number of Environmental Complaint Received from \_\_\_\_\_ to \_\_\_\_\_.  \_\_\_\_\_

**D General / Housekeeping**

	N/A or not observed	Yes	No	Photo/Remarks
D1 Are potential stagnant pools cleared and mosquito breeding prevented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____

**Items for Inspection**

**Notes / Issues Recorded On Site**

**Corrective Actions**

Signatures:  
(MT)



(Name: Joanna Kwan )