
South-East Asia Japan Cable System (SJC)

Hong Kong Segment

**Environmental Impact Monitoring and Site
Audit Report**

Week 6

23 July 2012 to 29 July 2012

ATKINS

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EXECUTIVE SUMMARY

The site preparation works for the SJC cable network system commenced on 21 June 2012. Atkins China Limited (ACL) has been appointed as the Environmental Team (ET) to undertake environmental management and monitoring work in accordance with the EM&A Manual.

This is the sixth weekly Environmental Impact Monitoring and Site Audit Report for the works specified in the Environmental Permit (EP-423/2011/A) and Environmental Monitoring and Audit (EM&A) Manual. This report summarises the findings and results of the EM&A during the reporting period of the sixth week of works and covers the reporting period 23 July 2012 to 29 July 2012.

Environmental Monitoring and Audit Progress

The EM&A programme have been undertaken in accordance with the approved EM&A Manual. A summary of the monitoring activities performed in the reporting period is summarised below:

- Weekly site environmental inspection was conducted on 27 July 2012

No marine works were during the reporting period. Therefore, no water quality monitoring and marine mammal inspection was conducted during reporting period.

Exceedance of Action and Limit Levels

No exceedance of action and limit level was recorded during the reporting period.

Complaint Log

No complaints were received in relation to environmental impact during the reporting period.

Site Inspection and Audit

Site inspection for shore based works was carried out on 27 July 2012. No non-compliances were recorded for the reporting period. A summary of findings conducted during the monitoring period is provided below.

27 July 2012

No beach works were carried out since 20 July 2012. General refuses were found in the shore area but it is not project-related.

1. INTRODUCTION

1.1 Background of the Project

- 1.1.1 South-East Asia Japan Cable System (SJC) is a submarine cable system linking South-East Asia to Japan. SJC will provide direct access and diverse routing between Singapore, the Philippines, Hong Kong, China, Brunei and Japan. The cable system will span approx. 8,900km and will be mainly composed of a seven-fibre pair high capacity submarine cable system with a design capacity of 17.9 terabits per second. The project will increase the broadband capacity of Hong Kong.
- 1.1.2 The Project is classified as a Designated Project under Item C12 of Part I Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO): “A *dredging operation which is (a) less than 500 metres from the nearest boundary of an existing or planned (iii) bathing beach; and (vii) coastal protection area*”.
- 1.1.3 In accordance with the EIAO, an environmental assessment was undertaken and a Project Profile was submitted to the Environmental Protection Department (EPD) (PP-444/2011) for an Application for Permission to Apply Directly for Environmental Permit for the project (Application No. DIR-213/2011) (DIR). The DIR was granted by EPD on 1st August 2011 with conditions.
- 1.1.4 Atkins China Limited (ACL) has been appointed as the Environmental Team (ET) to undertake environmental management and monitoring work in accordance with the EM&A Manual and required under the Variation of Environmental Permit (No. EP-423/2011/A) issued to China Telecom (Hong Kong) International Limited in October 2011 for the Project of South-East Asia Japan Cable System (SJC) — Hong Kong Segment.
- 1.1.5 This is the sixth Weekly Environmental Impact Monitoring and Site Audit Report for the works specified in the Environmental Monitoring and Audit (EM&A) Manual. This report summarises the results and findings of the EM&A during the reporting period 23 July 2012 to 29 July 2012.

1.2 Summary of Impact EM&A Requirements

- 1.2.1 The EM&A programme requires environmental monitoring for water quality, marine mammals and construction and demolition waste management, as specified in the EM&A Manual. This shall be conducted accordingly.

1.3 Works Undertaken

- 1.3.1 The works did not take place on site from 23 July 2012 to 29 July 2012 and stand by at To Kwa Wan Typhoon Shelter for vessel repair works.

2. MONITORING RESULTS

2.1 Water Quality

Programme

2.1.1 No marine works were during the reporting period. Therefore, no water quality monitoring was conducted during reporting period.

Monitoring Stations

2.1.2 Seventeen water quality monitoring stations were sampled during the impact water quality monitoring (see Figure 2-1) and listed in Table 2-1 as follows. These stations are applicable for works undertaken during installation of the cable.

Table 2-1 – Impact Water Quality Monitoring stations

Monitoring Station	Co-ordinates		Station Purpose
A1	839451	808265	180m from point A
A2	839511	808265	120m from point A
A3	839571	808265	60m from point A
A4	839691	808265	60m from point A
A5	839751	808265	120m from point A
A6	839811	808265	180m from point A
B1	839408	808160	180m from point B
B2	839468	808160	120m from point B
B3	839528	808160	60m from point B
B4	839648	808160	60m from point B
B5	839708	808160	120m from point B
B6	839768	808160	180m from point B
C	840081	808353	Control Station
D1	839429	808641	100m from point D
D2	839540	808552	100m from point D
D3	839453	808443	100m from point D
D4	839344	808531	100m from point D

Methodology

2.1.3 Water quality monitoring was conducted in accordance with the methodology described in the EM&A Manual.

2.1.4 The water quality parameters monitored included dissolved oxygen (DO) (% saturation and mg/L), temperature, turbidity (NTU), salinity and suspended solids (SS). DO, temperature, turbidity and salinity were measured *in-situ* whereas SS was determined by laboratory analysis.

2.1.5 Laboratory analysis of SS was carried out at ALS Laboratory Group, a recognised HOKLAS accredited laboratory.

Results

2.1.6 No marine works were during the reporting period. Therefore, no water quality monitoring and marine mammal inspection was conducted during reporting period.

2.2 Marine Mammals

2.2.1 No marine works within marine mammals inspection area in accordance with the EM&A manual were undertaken during the reporting period. Therefore, no marine mammal inspection was conducted during reporting period.

2.3 Construction and Demolition Waste Management

2.3.1 Weekly environmental site inspection was undertaken on 27 July 2012. No construction and demolition waste were found in the site area.

3. ENVIRONMENTAL NON-COMPLIANCE AND COMPLAINTS

3.1 Environmental Exceedances

Water Quality

3.1.1 No marine works were during the reporting period. Therefore, no water quality monitoring was conducted during reporting period.

3.2 Site Inspections

3.2.1 Site inspections for shore based works were carried out on 27 July 2012 as appropriate. No non-compliances were recorded for the reporting period. A summary of findings conducted during the monitoring period is provided in Table 3-1.

Table 3-1 – Summary of Environmental Site Inspections

Date of Inspection	Observation	Action
27 July 2012	No beach works were carried out since 20 July 2012. General refuses were found in the shore area but it is not project-related.	Nil.

Photo 1: No beach works were carried out since 20 July 2012. General refuses were found in the shore area but it is not project-related



3.3 Environmental Complaint

3.3.1 No complaints were received in relation to environmental impact during the reporting period.

4. FORECAST AND SCHEDULE

4.1 Key Engineering Works for the Coming Week

- Cable lay and burial recovery operation

4.2 Monitoring Schedule for the Coming Week

Water Quality Monitoring

4.2.1 No marine works would be carried out in coming week. Therefore, no water quality monitoring is scheduled for the coming week.

Marine Mammal Inspection

4.2.2 The marine work was finished the section of marine mammals inspection area on 21 July 2012. No marine mammal inspection is necessary for the coming week

5. CONCLUSION

- 5.1.1 This is the sixth weekly Environmental Impact Monitoring and Site Audit Report prepared by Atkins China Limited (ACL), for the consultancy services for the south-East Asia Japan Cable System (SJC) Project. This report been prepared in compliance with the Environmental Permit (EP-423 / 2011 /A) and associated EM&A Manual, and covers the reporting period 23 July 2012 to 29 July 2012.
- 5.1.2 No marine works were during the reporting period. Therefore, no water quality monitoring was conducted during reporting period.
- 5.1.3 Site inspection was carried out as appropriate with no non-compliances recorded for the reporting period. During site inspection on 27 July 2012, general refuses were found in the shore area but it is not project-related.
- 5.1.4 Overall, environmental impacts arising from the project activities have been controlled and properly rectified.

Figures

