

CONTRACT NO. GE/2008/28

**TERRITORY-WIDE AIRBORNE LIGHT DETECTION AND RANGING
(LiDAR) SURVEY**

PART 5 – SPECIFICATION

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SPECIFICATION

1 SCOPE OF SERVICES

1.01 Objective of the Services

The objective of the Services is to conduct an airborne Light Detection and Ranging (LiDAR) survey over the Survey Area (as shown in Plan 1 at Appendix A to the Specification) to obtain the LiDAR survey results for Hong Kong.

1.02 Descriptions of the Services

The Services consist of the following tasks:

- (a) The Contractor shall deploy the aircraft and equipment meeting the requirements in Clauses 2.01 and 2.02 of this Specification respectively for implementing the data capturing as in Clauses 3.01 and 3.02 of this Specification.
- (b) The Contractor shall process the data captured and prepare and submit the survey results in the forms of Principal Datasets and Electronic Terrain and Obstacle Data required in Clauses 4.08 and 4.09 of this Specification, respectively.
- (c) The Contractor shall carry out the data quality checking required in Clauses 3.03 – 3.07 of this Specification.
- (d) The Contractor shall submit the following Proposals/Reports:
 - (i) Inception Report as given in Clause 4.03 of this Specification;
 - (ii) Flight Plan Proposal as given in Clause 4.04 of this Specification;
 - (iii) Data Quality Checking Proposal as given in Clause 4.05 of this Specification; and
 - (iv) Final Report as given in Clause 4.06 of this Specification;
- (e) The Contractor shall conduct a Debriefing as given in Clause 4.10 of this Specification; and
- (f) The Contractor shall implement the safety provisions in Clauses 5.01 – 5.05 of this Specification.

1.03 Information to be provided to the Contractor

- (1) The latest version, available at the date for commencement of the Services, of the following information will be provided to the Contractor:
 - (a) 1:1,000 topographic maps containing the contour line, road, building polygons and drainage-lines of the Survey Area;
 - (b) Orthophoto of the HKSAR for feature verification purposes; and
 - (c) Slope polygons contained in the Government Catalogue of Slopes.

The Contractor shall undertake to abide by the required terms and conditions in the Use of Digital Map Data from Lands Department for items (a) and (b).

- (2) The following information can be obtained from the website of the Lands Department:
- (a) Transformation parameters between WGS84 and HK80 Geodetic Datum;
 - (b) Projection parameters of Hong Kong 1980 Grid System; and
 - (c) Separation model or parameters for conversion between WGS84 Ellipsoidal height and Hong Kong Principal Datum (HKPD) height.