



## LiDAR Data Order Form

For Official Use	
File Ref.	( ) in CEDDSY 9/3/5
LS/C	

### (for Government Department / Bureau)

(Please read the Annex on next page prior to completing this form. Information collected will only be used for processing your request and statistical purposes.)

**To : CLS (Attn: SLS/GE)**

**FAX No. : 2714 0174**

**Department / Bureau :** \_\_\_\_\_ **Division / Section** \_\_\_\_\_

**Contact Person :** \_\_\_\_\_ **Post :** \_\_\_\_\_ **Phone / Fax :** \_\_\_\_\_

**Lotus Notes Address :** \_\_\_\_\_

**Project / Contract No. :** \_\_\_\_\_

**Project / Contract Name :** \_\_\_\_\_

**Intended Uses of the LiDAR Data**

(If the following space is not enough, please complete the description on separate sheet)

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**Area of Interest** (If the below space is not enough, please complete your listing with an excel file)

Fill in the co-ordinates of boundary / Sheet Numbers (Refer to the Sheet Index of B1000)

Total number of sheets :			

**File Format**

- |                    |                                   |  |  |   |                                 |   |
|--------------------|-----------------------------------|--|--|---|---------------------------------|---|
| <b>a. LAS</b>      | All Data <input type="checkbox"/> | Any 1 <sup>st</sup> Returns <input type="checkbox"/> | 1 <sup>st</sup> of Many Returns <input type="checkbox"/> | Intermediate Returns <input type="checkbox"/> | Ground <input type="checkbox"/> | Any Last Returns <input type="checkbox"/> |
| <b>b. ASCII</b>    | DEM <input type="checkbox"/>      | DSM <input type="checkbox"/>                         |  |   |                                 |   |
| <b>c. dBase IV</b> | DEM <input type="checkbox"/>      | DSM <input type="checkbox"/>                         |  |   |                                 |   |
| <b>d. Raster</b>   | Vegetation                        | ERS <input type="checkbox"/>                         | GeoTIFF <input type="checkbox"/>                         | PIX <input type="checkbox"/>                  |                                 |   |
|                    | DTM                               | ERS <input type="checkbox"/>                         | GeoTIFF <input type="checkbox"/>                         | PIX <input type="checkbox"/>                  |                                 |   |
|                    | DSM                               | ERS <input type="checkbox"/>                         | GeoTIFF <input type="checkbox"/>                         | PIX <input type="checkbox"/>                  |                                 |   |
|                    | 0.5m Intensity Imagery            | ERS <input type="checkbox"/>                         | GeoTIFF <input type="checkbox"/>                         | PIX <input type="checkbox"/>                  |                                 |   |



## Use of LiDAR Data

### CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

#### Conditions on Use of LiDAR Data

1. The Government of the HKSAR remains the owner of the Territory-wide Airborne Light Detection and Ranging (LiDAR) Data at all times. The user is hereby permitted to make copy of the LiDAR Data for the sole purpose of the Project/Contract as stated in the LiDAR Data Order Form. The user shall not infringe any intellectual property rights of the Government of the HKSAR in the LiDAR Data, whether in whole or in part. Prior written consent must be obtained from the Chief Land Surveyor of the CEDD Headquarters separately should the user distribute or publish any reports, technical papers or relevant products, which involve the use of the LiDAR Data, to any third party or in the public domain. In the event that the consent is given, acknowledgement to the Government of the HKSAR that –
  - a) the Government of the HKSAR is the owner of the intellectual property rights in the LiDAR Data; and
  - b) whilst the Government endeavours to ensure the accuracy of the LiDAR Data, no statement, representation, warranty or guarantee, express or implied, is given as to its accuracy or appropriateness for use of the LiDAR Data in the reports, technical papers or relevant products and the Government is not responsible for any loss or damage whatsoever arising out of or in connection with the use of the LiDAR Data.

shall be made in the reports or technical papers or relevant products. The user shall not distribute the LiDAR Data in whole or in part and in whatever forms and media to any third party.
2. The LiDAR Data has been prepared by CEDD of the Government of the HKSAR or its consultants to serve their own purpose and for their own use. They are not prepared to meet the user's individual requirements and purpose specifically. The Government of the HKSAR gives no warranty that the LiDAR Data is error-free. The Government of the HKSAR shall under no circumstances whatsoever be responsible for or held responsible for any loss or damage which may be suffered by the users in consequence of the use of the LiDAR Data.
3. The LiDAR Data provided were obtained from the LiDAR Survey under CEDD Contract No. GE/2008/28 (hereafter named as "the Project") conducted between 1 December 2010 and 8 January 2011. The LiDAR Data were prepared in accordance with the practice and information available at the time of preparation. They are therefore subject to time limitation as subsequent changes in technical knowledge and/or physical changes in site conditions may affect parts of the LiDAR Data.
4. The user shall not use the LiDAR Data provided for any purposes other than the "Intended Uses of the LiDAR Data" for the Project/Contract stated in the LiDAR Data Order Form.

#### Notes on LiDAR Data Provided

1. The following types of LiDAR Data, obtained from the Project conducted between 1 December 2010 and 8 January 2011, are provided, where appropriate:
  - (a) Files with names suffixed with "DEM"  
The files contain LiDAR Data points classified as ground. No thinning process was required in this Project. The co-ordinates (easting and northing) and elevations of the points are provided in ASCII format and dBaseIV format. Intensity values and flight line numbers of the points are also included in the dBaseIV format. Each file covers a 1 km × 1 km area.
  - (b) Files with names suffixed with "DSM"  
The files contain LiDAR Data points such as buildings and tree tops for digital surface modeling. The co-ordinates (easting and northing) and elevations of the points are provided in ASCII format and dBaseIV format. Each file covers a 1 km × 1 km area.
  - (c) Files with names suffixed with "LAS"  
The files contain all the reported LiDAR Data points in the Project in a binary format following the LAS 1.1 Standard published by the American Society for Photogrammetry and Remote Sensing. Each file covers a 1 km × 1 km area.  
The following Class Nos. are used to represent different classes of the LiDAR Data points:
 

Class No.	Description	Class No.	Description
0	Created, never classified	7	Low Point (noise)
1	Unclassified	8	Model Key-point (mass point)
2	Ground	10	Reserved for ASPRS Definition
3	Low Vegetation	11	Error Points
4	Medium Vegetation	12	Overlap Points
5	High Vegetation	13-31	Reserved for ASPRS Definition
6	Building		
  - (d) Intensity & Vegetation Classes Models  
Intensity and Vegetation Classes Raster Model are available in GeoTIFF, \*.pix and \*.ers formats.
2. All LiDAR Data provided are in Hong Kong 1980 Grid System and Hong Kong Principal Datum.
3. The name of the file indicates the co-ordinates of the southwest corner of the area represented by the file. For example, e830n814\_DEM covers the area with southwest corner at (830 000E, 814 000N).