ITEM FOR ESTABLISHMENT SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 138 – GOVERNMENT SECRETARIAT : DEVELOPMENT BUREAU (PLANNING AND LANDS BRANCH) HEAD 91 – LANDS DEPARTMENT Subhead 000 Operational expenses

Members are invited to recommend to the Finance Committee the creation of the following posts with effect from 1 April 2020 or upon approval of the Finance Committee (whichever is later) –

Government Secretariat: Development Bureau (Planning and Lands Branch)

- (a) creation of the following supernumerary post up to 31 March 2025 –
 - 1 Chief Land Surveyor (D1) (\$144,100 - \$157,700)

Lands Department

- (b) creation of the following supernumerary post up to 31 March 2025 –
 - 1 Government Land Surveyor (D2) (\$171,200 - \$187,150)

/PROBLEM

PROBLEM

We need additional staffing support at the directorate level in the Development Bureau (Planning and Lands Branch) (DEVB(PLB)) and the Lands Department (LandsD) to oversee the implementation of the Common Spatial Data Infrastructure (CSDI), thereby ensuring that major deliverables can be rolled out on schedule according to our pledged timetable.

PROPOSAL

2. We propose to strengthen directorate staffing support in DEVB(PLB) and LandsD through the following proposals –

- (a) creation of one supernumerary Chief Land Surveyor (CLS) (D1) post, to be designated as Chief Land Surveyor/Spatial Data Infrastructure (CLS/SDI), for five years up to 31 March 2025, to lead the newly established Spatial Data Office (SDO) in the DEVB(PLB) in steering and expediting the development of CSDI amongst other things; and
- (b) creation of one supernumerary Government Land Surveyor (GLS) (D2) post, to be designated as Assistant Director/Mapping Management (AD/MM), for five years up to 31 March 2025, to head the Mapping Management Centre (MMC) to be established in the Survey and Mapping Office (SMO) of the LandsD for supporting the rolling out of CSDI, and overseeing the work of the Building Information Modelling (BIM) and land boundary advisory services amongst other things.

JUSTIFICATION

3. Enhancing the use, management, discovery and sharing of spatial data¹ is increasingly recognised worldwide as the key to robust policy-making and driving innovation and value creation of society. Advanced economies such as Singapore, the United Kingdom and the United States have long built their own spatial data infrastructure facilitating spatial data sharing and usage by the Government and the public. Acknowledging that spatial data infrastructure is vitally important to smart city development, the Smart City Blueprint released in December 2017 has committed to developing the CSDI with two major components, viz. an internet-based portal (the CSDI portal) and the three- dimensional (3D) digital map.

/4.

¹ Spatial data is the data with a location component such as geographical coordinates. Examples of spatial data held in government bureaux/departments (B/Ds) are topographic maps, public facility data, land boundary data, planning data, etc.

4. The **CSDI portal** functions as a one-stop data supermarket opening up and centralising multi-source spatial data converted into open and machinereadable formats and available for free download and use by the public. The map of Hong Kong will form the base of the one-stop database which, when intersected with other spatial datasets such as location of public facilities or demographic data, can enable B/Ds, professionals, academics and the general public to harness the power of big data. Not only can the CSDI portal create daily convenience (such as journey planning between destinations), it can also enhance policy making functions (such as urban planning and infrastructure development). More importantly, it can spur innovation and encourage the public including application developers to make the most of the spatial data for development of new web and mobile applications.

5. By providing a more detailed, realistic and true view of the real world, the **3D digital map** can help better understand multi-level spaces of a modern city like Hong Kong. The 3D digital map will eventually replace the 2D digital map to serve as the basemap and container of the CSDI portal. It can also support 3D applications including visualisation, noise/air/flooding modelling, indoor/outdoor navigation, etc. to support land administration, urban planning, transportation management, etc. undertaken by B/Ds.

6. With the earmarking of \$300 million in the 2019-20 Budget, we aim at advancing the full operation of the CSDI portal to end 2022 (one full year earlier than our original target) and making available the 3D digital map of the whole territory by 2023. We consulted the Legislative Council (LegCo) Panel on Development² and the Land and Development Advisory Committee (LDAC)³ on the funding application of \$300 million in June and July 2019 respectively. Both bodies strongly supported the two initiatives of the CSDI portal and 3D digital map. Suggestions received include releasing more government data beyond DEVB's family of departments and private sector data such as real-time bus arrival information and underground utilities onto the CSDI as soon as possible; and more engagement with stakeholders to better align the CSDI design with the public expectation.

7. DEVB and LandsD will assume a leading role in taking forward the CSDI implementation, with the support of the Innovation and Technology Bureau, Office of the Government Chief Information Officer, and other B/Ds. To enable delivery of the CSDI initiative under a compressed timetable, there is strong operational need to strengthen the directorate resources in DEVB and LandsD.

/(a)

² Panel on Development LC Paper No. CB(1)1181/18-19(05) refers.

³ LDAC is an advisory committee under DEVB to advise the Government on policies and measures in relation to planning, land and buildings matters. It is chaired by a non-official with most members representing the professional, academic and other sectors of the community.

(a) Need for a Supernumerary CLS Post in DEVB(PLB)

8. To guide our work in the years ahead, we have developed a tentative workplan with a view to attaining the target of the CSDI portal in full operation by end 2022 (please see Table 1 of Enclosure 1). Specifically, between now and 2022, Encl. 1 we will enhance and transform the Hong Kong GeoData Store under LandsD's management into the CSDI portal with initial focus on spatial data held by DEVB's family of departments. We will roll out the CSDI portal with about 70 additional datasets in phases (on top of the some 140 datasets currently under the Hong Kong GeoData Store), first within Government by end 2021 and then to the public by end 2022. Subject to Finance Committee's approval of the \$300 million funding application, we will also launch in the coming year or so four quick win projects for use within and/or outside Government, viz. Map Application Programming Interface⁴, Geotagging Tool⁵, Address Data Infrastructure⁶, and District-based Spatial Information Dashboard⁷. The CSDI will continue to evolve and expand beyond 2022 with the release of more government spatial data outside DEVB's regime. In the longer run, we should realise more fully the potential of CSDI by securing the co-operation of the private sector including public transport operators and utility companies to make available their spatial data for sharing through the CSDI portal.

> 9. Within DEVB, the newly established SDO staffed by a multidisciplinary team⁸ would be responsible for steering the CSDI development through a range of functions. These include formulation and application of spatial data policy⁹ and measures in consultation with B/Ds; development of a detailed implementation plan for progress monitoring; early identification of potential

> > /implementation

⁴ A web mapping service for the public and private sectors to support their web applications that require map display. It enables the community to build innovative applications enriched with locational and other features such as virtual city navigation.

⁵ A tool to convert non-spatial data (e.g. demographic data) or ground features into spatial data.

⁶ To standardise location identifiers across departments, to avoid confusion in identifying buildings/premises, allowing B/Ds to improve public services, such as postal delivery, assessment of rateable value, emergency services and management of complaint cases (e.g. calling by 1823).

A web-based application that uses charts, gauges, maps, and other visual elements to provide public and private sectors with consistent, up-to-date and consolidated spatial information. In short, a dashboard assimilates different online information and provides data analytics. It has been commonly used for city management as well as an understanding of public opinions and trends in other places.

⁸ The existing manpower of SDO consists of one Senior Land Surveyor, one Senior Systems Manager, one Land Surveyor, one Town Planner and one Assistant Clerical Officer, which were created on a 5-year time-limited basis in 2019-20.

⁹ Our policy intent is to encourage B/Ds to release spatial data for sharing through the CSDI portal for free, unless there are legitimate policy and/or operational reasons for not doing so. To what extent this can be applied to individual cases will be subject to discussion with respective B/Ds.

implementation problems and mapping out possible solutions; regular high-level liaison with B/Ds to solicit their support and enhance their readiness for CSDI participation; collaboration with B/Ds to develop common applications based on spatial data; formulation and execution of plans for capacity building and public engagement; and overseeing the operation of various committees and working groups set up to support the CSDI implementation.

10. The SDO should be headed by a professional grade officer with technical competency and professional know-how in spatial technology (e.g. spatial data processing, spatial database management, web map portal development and standard development), digital infrastructure, data interoperability, quality control and cartography, as well as domain knowledge. The post should be pitched at a sufficiently senior level as the SDO head is expected to contribute strategic inputs and macro thinking in the formulation of spatial data policy and measures. The post-holder will also need to work with stakeholders of different backgrounds including B/Ds, the private sector, professionals, academia, etc. He/she should be experienced enough and possess the calibre, maturity and tactfulness in conducting negotiations with people from different bodies and convincing them about the significance of the CSDI and securing their cooperation to work towards the common goal. Moreover, after the launch of the CSDI portal and 3D digital map by end 2022 and 2023 respectively, he/she will need to continue to lead the SDO for releasing more spatial data owned by different stakeholders, overseeing the continual operation of the portal, identifying room for improvement and making a longer term strategic plan in order to achieve sustainable development for the CSDI. In the light of the above, we propose creating one supernumerary CLS (D1) post, to be designated as CLS/SDI, for five years up to 31 March 2025 to lead the SDO.

11. Within the Planning Unit of DEVB(PLB) there is the Land Supply Information System (LSIS) Team comprising five permanent professional and technical posts responsible for supporting various policy teams in tracking land creation initiatives based on spatial data and related technologies as well as mapping information. The proposed CLS post will also supervise the LSIS Team apart from the team of staff in SDO. This can achieve operational synergy and enhance support in spatial data analytics for DEVB and its family of departments on various land supply initiatives.

12. The proposed job description of the supernumerary CLS/SDI post is Encls. 2 - 4 at Enclosure 2. The existing and proposed organisation charts of DEVB(PLB) for the implementation of the CSDI are at Enclosures 3 and 4 respectively. 13. To provide the necessary support to the proposed CLS/SDI post, seven new non-directorate time-limited posts from professional, technical and secretarial grades will be created in 2020-21.

(b) Need for a Supernumerary GLS Post in LandsD

14. The SMO of LandsD with its wealth of experience in mapping and surveying will play a key role in the CSDI implementation in two aspects. First, for the CSDI portal, the SMO will provide strong technical support for the SDO in designing the overall architecture of the CSDI portal riding on the Hong Kong GeoData Store currently under its management. Apart from delivering the four quick win projects in paragraph 8 above, the SMO is also responsible for setting data standards for compliance by B/Ds in releasing their spatial data onto the CSDI portal. Second, in tandem with the development of the CSDI portal, the SMO will further develop and upgrade the existing 2D digital map into a fullfledged 3D digital map as the basemap and container for CSDI covering the entire territory by end 2023 (please refer to the tentative workplan in Table 2 of Enclosure 1). There is a pressing need for the SMO to formulate a holistic framework for 3D digital map covering the fundamental positioning infrastructure; common spatial data and technology standard for compliance by B/Ds and other stakeholders; 3D digital map standards; and the strategy, framework and action plan for the development of 3D digital map through collection, integration, distribution and sharing of quality 3D spatial data.

15. The BIM data forms a valuable data source for developing the 3D digital map. As capital works projects costing more than \$30 million are mandated to use BIM technology, the volume of BIM data kept by various works departments is expected to grow exponentially. To ensure smooth integration of the BIM data with the 3D digital map, the SMO will collaborate with works departments to agree on 3D spatial data standards to be followed by works departments in collecting and storing BIM data required by the 3D digital map.

16. In view of the scope and complexity of these multi-faceted issues and the growing public aspiration for the CSDI portal and 3D digital map, there is a need for a dedicated directorate officer at D2 level in LandsD to provide strategic thinking and leadership in supporting the roll-out of the CSDI portal, as well as taking forward the development of the 3D digital map. Specifically, we propose creating a new GLS (D2) post for five years up to 31 March 2025 in the SMO of LandsD to lead the new MMC responsible for providing support to SDO in the CSDI implementation and developing the 3D digital map.

17. The GLS will steer the MMC in the formulation of directions, standards, implementation plans, as well as collaboration with key stakeholders, in the 3D digital map development of the whole territory, and resolve differences with B/Ds to arrive at a practicable solution with the target of delivering the 3D digital map of the whole territory in phases by end 2023. The GLS will develop action plans on the creation of the initial set of 3D digital map for the whole territory and formulate the strategy for on-going updating and maintenance to support various functions including land management, urban planning, land development, transportation, disaster and emergency analysis undertaken by B/Ds. The GLS will also formulate the strategy for integration between BIM and Geographic Information System (GIS) to promote applications on spatial-temporal analytic and multi-dimension simulations, as well as 3D data management among different B/Ds.

18. Another core role of SMO is delineation of land boundary for the whole territory. Apart from providing professional advice on the land boundary matter to support the land administration in LandsD, it is crucial for SMO to extend its land boundary advisory and survey services to support other B/Ds for their carrying out statutory enforcement actions. The boundary data will become one of the core sets of spatial data in support of land administration under the CSDI portal. The GLS will be tasked to lead and oversee the provision of the land boundary delineation services for other B/Ds in the latter's discharge of their statutory functions.

19. In order to accomplish the above committed tasks, the GLS will have to oversee the structural review and implement the organisation changes by phases thereafter. The duties and responsibilities mentioned in the above paragraphs will also extend beyond the completion of the operation of CSDI portal and 3D digital map by 2022 and 2023 respectively.

20. Currently there is an existing GLS and four CLS posts in SMO. To optimise existing directorate staffing resources and the proposed GLS in SMO to cope with upcoming challenges in particular the development of the CSDI portal and 3D digital map, SMO has decided upon review to re-organise its teams to achieve a more balanced distribution of responsibilities and workload among respective GLSs and CLSs having regard to SMO's

/priorities

priorities¹⁰. The proposed GLS will be underpinned by CLS/MM (retitled from the existing CLS/U post) and CLS/LIC in overseeing the new MMC and existing LIC. There is operational merit for the proposed GLS to take over from the existing GLS on the management of the LIC, as support from LIC is operationally crucial to the implementation of the 3D digital map and CSDI portal.

21. The proposed job description of the supernumerary GLS (D2) post is Encls. 5 - 7 at Enclosure 5. The existing and proposed organisation charts of SMO in LandsD are at Enclosures 6 and 7.

22. In addition to the above directorate staffing proposal, a total number of 13 non-directorate time-limited posts from professional, technical and clerical grades will be created in 2020-21 in the MMC.

ALTERNATIVES CONSIDERED

Encl. 8

23. We have critically examined the possible redeployment of other existing directorate officers within DEVB(PLB) to take on the work of the proposed CLS/SDI post. At present, the existing Principal Assistant Secretaries (PASs) are fully occupied and overloaded with the ongoing and new tasks relating to increasing and expediting land supply, and have no spare capacity to take up the development of the CSDI portal. Nor do they have the required professional knowledge and experience in spatial technology and CSDI development¹¹. Hence, internal redeployment is not viable. Enclosure 8 shows the schedule of responsibilities of the existing PASs in DEVB(PLB).

/24.

¹⁰ The work portfolios of existing CLS/Urban (CLS/U), CLS/New Territories (CLS/NT) and CLS/Headquarters (CLS/HO) will be reshuffled. The CLS/U, to be retitled as CLS/Mapping Management (CLS/MM), will be redeployed to head the MMC. He/She will assist the proposed GLS in the development of 3D digital map, as well as establishment and maintenance of positioning infrastructure, and take over from existing CLS/HQ the imagery and intelligence collection services to support change detection for LandsD and other departments' functions. The existing CLS/NT, to be retitled as CLS/Region, will undertake all regional oriented portfolios that mainly include survey support to land administration, land boundary survey and advisory services for other departments, and maintenance of base map and land information databases. The existing duties of CLS/U and CLS/NT on providing support to Land Survey Authority, and land development projects such as Three-runway System, railway development will be taken up by CLS/HQ in addition to his/her existing duties including human and financial resources management, management of technical information and formulation of training and development strategy. CLS/Land Information Centre (LIC) continues to focus on the implementation of information technology strategy, provision and management of geospatial data so as to support LandsD, SDO and other departments as well as management of SMO's public service portals. He/she will also oversee the integration of BIM and GIS which is an increasingly important area for the development and maintenance of 3D digital map.

¹¹ Except for one PAS who is a Government Town Planner (D2), all other seven PASs are Administrative Officer Staff Grade C (D2) officers.

Encl. 9

24. For LandsD, there is only one GLS (Assistant Director/Survey & Mapping (AD/SM) at D2) as shown at Enclosure 6. The AD/SM is already overloaded with his/her existing work portfolio, including overseeing the operation of the SMO Headquarters, LIC, New Territories Survey Division and Urban Survey Division involving over 1 040 staff. The workload of the AD/SM has been further increased in recent few years to oversee the survey, mapping and spatial data support for major initiatives such as increasing land supply, resumption at New Development Areas, Three Runway System, land control and lease enforcement, etc. The advisory services on survey, mapping and GIS matters under AD/SM's charge have also been extended to other B/Ds such as the East Kowloon Energizing Office, Home Affairs Department (permitted burial grounds), Fire Services Department (Fourth Generation Mobilising System), Marine Department (East Asia Regional Electronic Navigational Chart), etc. The AD/SM is fully engaged in his existing work and is operationally unable to take up additional duties without adversely affecting the discharge of his current duties. Details of work schedule for the existing GLS in LandsD is at Enclosure 9.

FINANCIAL IMPLICATIONS

25. The proposed creation of one supernumerary CLS post in DEVB(PLB) and one supernumerary GLS post in LandsD will involve an additional notional annual salary cost at mid-point of \$4,016,400. The additional full annual average staff cost, including salaries and staff on-cost, is \$6,511,000. A breakdown is shown below –

Bureau/ Department	Directorate Post	No.	Notional annual salary cost at mid-point (\$)	Full annual average staff cost (\$)
DEVB(PLB)	CLS (D1)	1	1,836,600	2,760,000
LandsD	GLS (D2)	1	2,179,800	3,751,000
	Total:	2	4,016,400	6,511,000

26. The seven non-directorate posts to be created in DEVB(PLB) in 2020-21 as mentioned in paragraph 13 above will involve additional notional annual salary cost at mid-point of \$5,233,440 and full annual average staff cost, including salaries and staff on-cost, of \$7,910,000. The 13 non-directorate posts to be created in LandsD in 2020-21 as mentioned in paragraph 22 above will involve additional notional annual salary cost at mid-point of \$8,244,300 and full annual average staff cost, including salaries and staff on-cost, of \$13,377,000. We will include the necessary provision in the 2020-21 draft Estimates of DEVB(PLB) and LandsD to meet the cost of the staffing proposal and will reflect the resources required in the Estimates of subsequent years.

PUBLIC CONSULTATION

27. We consulted the LegCo Panel on Development on 19 November 2019. Members supported the submission of the above staffing proposal to the Establishment Subcommittee for consideration.

ESTABLISHMENT CHANGES

28. The establishment changes in DEVB(PLB) and LandsD for the past three years are as follows –

	Number of posts							
Establishment (Note)	Existing (as at 1 November 2019)	As at 1 April 2019	As at 1 April 2018	As at 1 April 2017				
DEVB(PLB)								
Α	14(1)	14(1)	14(1)	13				
В	66	56	46	44				
С	107	101	92	89				
Sub-total for DEVB(PLB)	187(1) [#]	171(1)	152(1)	146				
LandsD								
Α	46	46	46	46				
В	763	735	626	610				
С	3 861	3 757	3 495	3 444				
Sub-total for LandsD	4 670 [#]	4 538	4 167	4 100				
Total	4 857(1)#	4 709(1)	4 319(1)	4 246				

Note:

A - ranks in the directorate pay scale or equivalent

B - non-directorate ranks, the maximum pay point of which is above MPS point 33 or equivalent

C - non-directorate ranks, the maximum pay point of which is at or below MPS point 33 or equivalent

() - number of supernumerary directorate posts created with the approval of the Establishment Subcommittee/Finance Committee

- as at 1 November 2019, there was no unfilled directorate post in DEVB(PLB) and LandsD.

CIVIL SERVICE BUREAU COMMENTS

29. The Civil Service Bureau supports the proposed creation of one supernumerary CLS post in DEVB(PLB) and one supernumerary GLS post in LandsD. The grading and ranking of the proposed posts are considered appropriate having regard to the level and scope of responsibilities.

ADVICE OF THE STANDING COMMITTEE ON DIRECTORATE SALARIES AND CONDITIONS OF SERVICE

30. As the posts proposed to be created are on a supernumerary basis, their creation, if approved, will be reported to the Standing Committee on Directorate Salaries and Conditions of Service in accordance with the agreed procedure.

Development Bureau December 2019

Table 1: Implementation Schedule for Common Spatial Data Infrastructure(CSDI)

Rolled-out Time	Deliverables
For internal use within Government by end 2021	Releasing through the CSDI portal about 70 additional data sets under Development Bureau's family of departments on top of the some 140 data sets already available on the Hong Kong GeoData Store.
By end 2021	Launching quick-win projects for use within and/or outside Government, including Map Application Programming Interface (API), Geo- tagging Tool, Address Data Infrastructure and District-based Spatial Information Dashboard.
CSDI in full operation and for use by the public by end 2022	Opening up the above $70 + 140$ data sets for free download and use by the public.
Beyond 2022	Releasing more data sets through the CSDI, subject to further discussion with bureaux/departments data owners on issues including data standardisation, availability of API data service, etc.

/Table

Rolled-out Time	Deliverables
By early 2020	Publish the 3D pedestrian network data covering the whole territory.
By end 2023	Publish the 3D digital map showing topographical and exterior features of terrain, buildings and infrastructures, initially covering Hong Kong Island, Kowloon and some new town areas, and the other areas of the territory eventually.
By end 2023	Extend the 3D digital map to cover the accessible interior of buildings and structures and publish 3D digital map showing the interior layout for 1 250 buildings.

Table 2: Implementation Schedule for Three-dimensional (3D) Digital Map

Proposed Job Description of Chief Land Surveyor (Spatial Data Infrastructure)

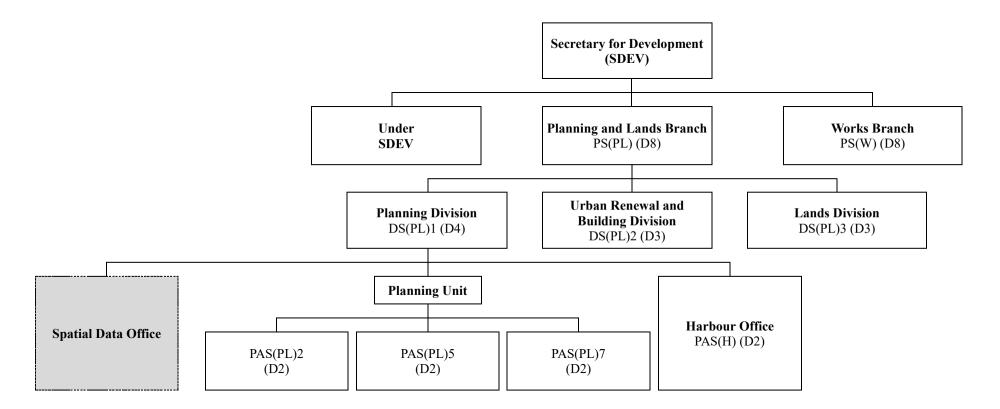
Rank : Chief Land Surveyor (D1)

Responsible to : Deputy Secretary (Planning and Lands)1 (DS(PL)1)

Main Duties and Responsibilities -

- 1. To coordinate Bureaux/Departments' (B/Ds') efforts in formulation of policies, strategies and measures in relation to the Common Spatial Data Infrastructure (CSDI) and related initiatives;
- 2. To formulate the overall implementation plan of CSDI including the launch of the CSDI portal and quick-wins projects, and monitor their implementation and the spending of funds allocated for the implementation of the CSDI portal;
- 3. To liaise with the senior management of B/Ds with focus on Development Bureau's family of departments initially, as well as that of other B/Ds and other stakeholders outside the Government, to secure their buy-in and participation in the CSDI portal, and identify potential implementation problems and map out possible solutions;
- 4. To co-ordinate B/Ds' efforts in developing common applications using spatial data and consider the interface between such applications and CSDI;
- 5. To formulate and execute the capacity building plan and stakeholders engagement plan to build capacity and foster partnership with B/Ds and external stakeholders;
- 6. To oversee the secretariat services for the Common Spatial Data Steering Committee and Common Spatial Data Advisory Committee, as well as various working groups formed under these Committees; and
- 7. To oversee the day-to-day operation of the Spatial Data Office (comprising Data and Application Advisory Services Team, Platform Development and Application Facilitation Team, and Capacity Building and Outreach Team) and the Land Supply Information System Team.

Existing Organisation Chart of the Planning and Lands Branch of the Development Bureau



Legend

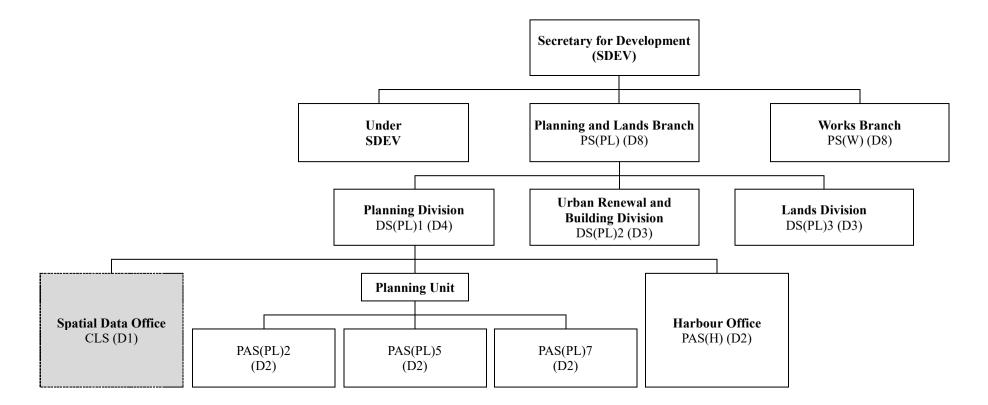
- DS(PL) Deputy Secretary (Planning and Lands) -
- PS(PL) Permanent Secretary (Planning and Lands)
- PAS(H) Principal Assistant Secretary (Harbour) PS(W) - Permanent Secretary (Works)
- PAS(PL) Principal Assistant Secretary (Planning and Lands)
- SDEV Secretary for Development

Under SDEV - Under Secretary for Development

- Five professional and clerical officer

grade posts created in 2019-20

Proposed Organisation Chart of the Planning and Lands Branch of the Development Bureau



Legend

CLS	-	Chief Land Surveyor	PAS(PL) -	Principal Assistant Secretary (Planning and Lands)	SDEV	-	Secretary for Development
DS(PL)	-	Deputy Secretary (Planning and Lands)	PS(PL) -	Permanent Secretary (Planning and Lands)	Under SDEV	-	Under Secretary for Development
PAS(H)	-	Principal Assistant Secretary (Harbour)	PS(W) -	Permanent Secretary (Works)		-	Proposed supernumerary CLS post

Proposed Job Description of Assistant Director/Mapping Management

Rank : Government Land Surveyor (D2)

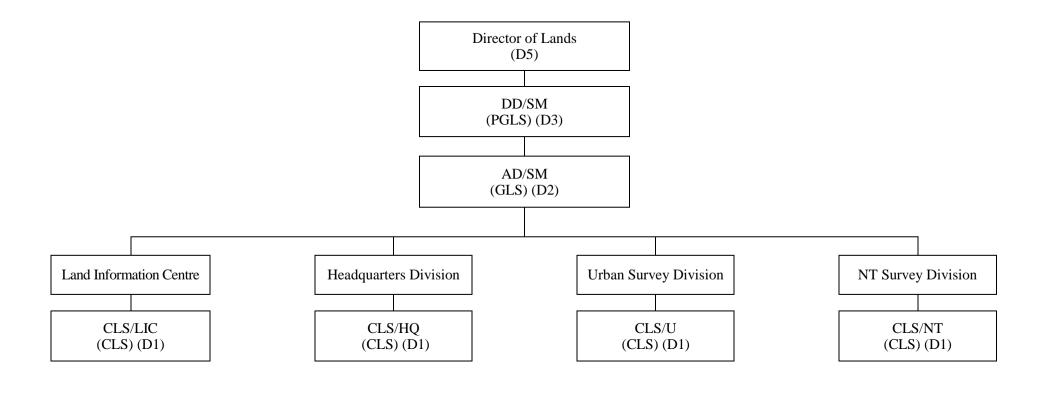
Responsible to : Deputy Director/Survey and Mapping

Main Duties and Responsibilities -

- 1. To act as the head of the Mapping Management Centre and Land Information Centre;
- 2. To work with Spatial Data Office of Development Bureau in the development and implementation of the Common Spatial Data Infrastructure (CSDI) under broader policy initiatives including data standards for the CSDI portal, open data strategy and the smart city initiatives, and provide strategic advice for the development and application facilitation;
- 3. To formulate overall strategy, spearhead policy, measures standards and guidelines in relation to CSDI development, three-dimensional (3D) digital map, Building Information Modelling (BIM) implementation, Geographic Information System (GIS) support, BIM/GIS integration, open spatial data adoption, positioning infrastructure enhancement and other new initiatives;
- 4. To oversee the creation of the initialised 3D digital map for the territory and formulate the strategy for on-going updating and maintenance of the digital map to support various functions of the Lands Department;
- 5. To collaborate with works departments on formulating BIM implementation plan, BIM-GIS integration, interfacing and harmonisation of BIM implementation and establishing mechanism to share BIM data among bureaux/departments (B/Ds);
- 6. To formulate spatial data policy and spatial data standards to facilitate the establishment of CSDI and promote the importance of data standards among different B/Ds;
- 7. To oversee the provision of land boundary advisory and survey services to support other B/Ds for their carrying out of enforcement actions in discharging statutory functions; and

8. To keep close liaison with Highways Department and Civil Engineering and Development Department in respect of survey and GIS matters.

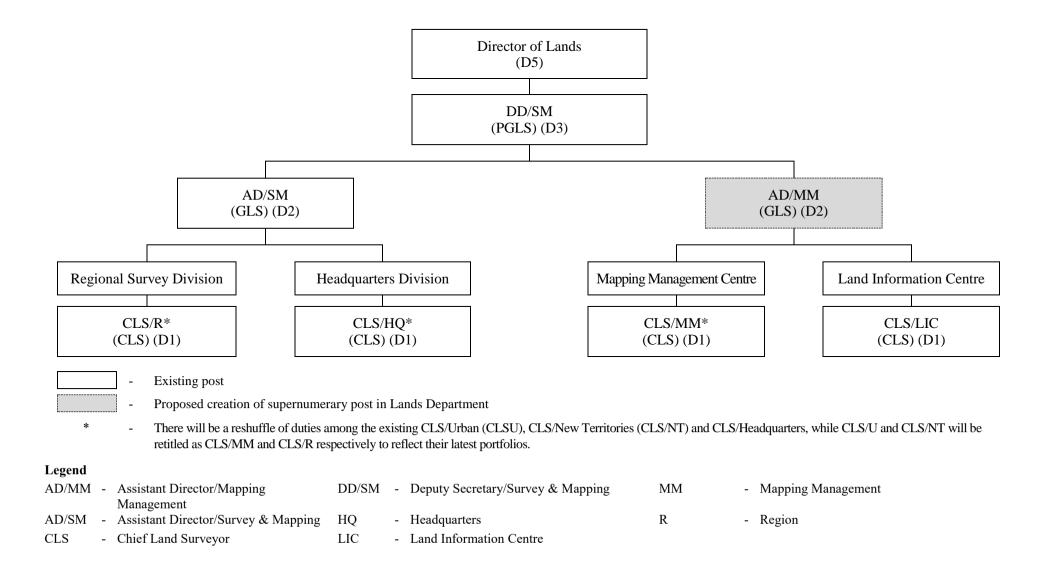
Existing Organisation Chart of Survey and Mapping Office, Lands Department



Legend

AD/SM -	Assistant Director/Survey & Mapping	CLS/LIC - Chief Land Surveyor/Land Information Centre	CLS/U	- Chief Land Surveyor/Urban
CLS/HQ -	Chief Land Surveyor/Headquarters	CLS/NT - Chief Land Surveyor/New Territories	DD/SM	- Deputy Secretary/Survey & Mapping

Proposed Organisation Chart of Survey and Mapping Office, Lands Department



Schedule of Responsibilities of the Existing Principal Assistant Secretary Posts in the Planning and Lands Branch of the Development Bureau

Principal Assistant Secretary (Planning and Lands) 1 (PAS(PL)1)

PAS(PL)1 heads Lands Unit 1 and assists Deputy Secretary (Planning and Lands)3 (DS(PL)3) in formulating and implementing policies and initiatives relating to increasing land supply for housing and commercial developments. One of PAS(PL)1's major tasks is to compile annual and quarterly Land Sale Programmes. Apart from formulating land sale policy and strategy, PAS(PL)1 is responsible for securing the readiness of sites for sale, providing land policy inputs for different planning or infrastructural studies relating to increasing land supply, PAS(PL)1 is required to handle site-specific issues with relevant etc. bureaux/departments (B/Ds) and resolve inter-bureau/departmental differences to ensure timely site disposal. Taking forward the West Rail property development projects is another key task falling under PAS(PL)1's work purview. It is the Government's objective to ensure that private housing land supply from various sources can meet the annual target to promote steady development of the property market. The land administration portfolio of PAS(PL)1 also includes the policy on the provision of public open space in private developments and the handling of land grants, lease modifications and land exchanges.

Principal Assistant Secretary (Planning and Lands) 2 (PAS(PL)2)

2. PAS(PL)2 heads Planning Unit 2 and assists Deputy Secretary (Planning and Lands)1 (DS(PL)1) in overseeing the overall land supply situation and formulating the land supply and land use planning strategies, as well as providing policy input to and overseeing land use reviews and planning studies concerning territorial, sub-regional, district and specific development. These include the rezoning work for some 210 potential housing sites, land use review of selected urban squatter areas, Tung Chung New Town Extension, 'Hong Kong 2030+: Planning Vision and Strategy Transcending 2030', formulation of the Land Sharing Pilot Scheme, and providing secretariat support to the Steering Committee on Land Supply. PAS(PL)2 also oversees the implementation of the statutory planning regime (except for enforcement issues), and assists in the housekeeping of the Planning Department. In addition, PAS(PL)2 also provides planning policy input to major development and infrastructure projects or public facilities with significant land use implications, other than those related to economic, industrial and agricultural land uses.

/Principal

Principal Assistant Secretary (Planning and Lands) 3 (PAS(PL)3)

3. PAS(PL)3 heads the Buildings Unit and assists Deputy Secretary (Planning and Lands)2 (DS(PL)2) in the housekeeping of the Buildings Department (BD) and the Land Registry, and is responsible for a full range of policy work on building safety and land registration matters. Apart from taking up the recurrent house-keeping and resource management duties, PAS(PL)3 looks after legislative proposals, including the amendments to various regulations under the Buildings Ordinance (Cap. 123) relating to minor works and building construction to facilitate the industry and/or accommodate innovative building technologies. PAS(PL)3 also oversees the exercise to streamline development control between PLB departments. PAS(PL)3 provides policy input and steer on building-related issues, including assistance for building owners in carrying out building rehabilitation works including but not limited to the newly-proposed Operation Building Bright 2.0 and the enhancements to the existing Building Management Grant Scheme for Elderly Owners, the review of BD's gross floor area concession arrangement for promoting green buildings in the private sector, enforcement against unauthorised building works, promotion of proper repair and maintenance of buildings, etc.

Principal Assistant Secretary (Planning and Lands) 4 (PAS(PL)4)

4. PAS(PL)4 heads the Urban Renewal Unit and provides support to DS(PL)2 in advancing the work of urban renewal in Hong Kong, providing policy guidance to the Urban Renewal Authority (URA)'s urban renewal programme, overseeing URA's implementation of the urban renewal programme vis-à-vis relevant provisions in the Urban Renewal Authority Ordinance (Cap. 563) and the Urban Renewal Strategy, scrutinising URA's Corporate Plans and Business Plans, processing URA's land resumption applications and dealing with policy, political and public relations issues related to urban renewal. PAS(PL)4 also provides support in overseeing URA's implementation of key initiatives including the district-based redevelopment strategy, the district planning study to explore how to enhance the efficiency of existing land use and redevelopment potential of Yau Ma Tei and Mong Kok districts and the redevelopment of selected sites under the Civil Servants' Co-operative Building Society Scheme. PAS(PL)4 also oversees policy matters of the Land (Compulsory Sale for Redevelopment) Ordinance (Cap. 545) and the implementation of the programme to provide support service for minority owners affected by redevelopments initiated under the Ordinance.

Principal Assistant Secretary (Planning and Lands) 5 (PAS(PL)5)

5. PAS(PL)5 heads Planning Unit 5 and assists DS(PL)1 in formulating strategies and policies and co-ordinating with B/Ds in facilitating cross-boundary planning and infrastructure developments from land use planning perspective, and

providing planning policy input related to Guangdong-Hong Kong-Macao Greater Bay Area development, Pan Pearl River Delta Region co-operation, Hong Kong/Guangdong Co-operation Joint Conference and Hong Kong/Shenzhen Cooperation Meeting. PAS(PL)5 is also responsible for handling planning policy issues of major cross-boundary infrastructural projects and individual projects at the boundary areas, such as the Lok Ma Chau Loop. In addition, PAS(PL)5 handles policy issues relating to and oversees the implementation of the proposals arising from the New Development Areas at Kwu Tung North/Fanling North and Hung Shui Kiu/Ha Tsuen, Yuen Long South, and New Territories North.

Principal Assistant Secretary (Planning and Lands) 6 (PAS(PL)6)

6. PAS(PL)6 heads Lands Unit 6 and assists DS(PL)3 in handling policy matters relating to land administration; and provides land policy input to proposals from other B/Ds. PAS(PL)6 is also responsible for rural land matters, including the Small House Policy, squatter control policy, land resumption, general compensation and rehousing matters for development clearance. PAS(PL)6 provides secretariat support to Land and Development Advisory Committee and serves as secretary for the Secretary for Development-Heung Yee Kuk Liaison Committee, in addition to chairing the Compensation Review Committee. PAS(PL)6 also handles land supply related matters on potential railway property development projects including the property development project at the Siu Ho Wan Depot Site. Moreover, PAS(PL)6 undertakes housekeeping duties of the Lands Department.

Principal Assistant Secretary (Planning and Lands) 7 (PAS(PL)7)

7. PAS(PL)7 heads Planning Unit 7, and assists DS(PL)1 in overseeing policy matters relating to development of brownfield sites as a source of land supply. PAS(PL)7 is responsible for overseeing the revitalisation scheme for industrial buildings and co-ordinating efforts to ensure smooth implementation of the relevant measures. PAS(PL)7 oversees the policy on rural land use control under the Town Planning Ordinance (Cap. 131) and related enforcement issues, as well as the policy on the interface issues between planning and conservation. PAS(PL)7 also handles relevant policy issues on economic and industrial land use planning, including specific development projects and studies. Moreover, PAS(PL)7 oversees the implementation of a funding scheme to support the use of vacant government sites by non-government organisations.

Principal Assistant Secretary (Harbour) (PAS(H))

8. PAS(H) heads the Harbour Office and assists DS(PL)1 in providing policy input to relevant planning and land matters related to Victoria Harbour and its harbourfront areas. PAS(H) provides secretarial support to the Harbourfront

Commission (HC), which is a high-level advocacy committee on planning, land uses and developments along the existing and new harbourfront of Victoria Harbour. PAS(H) is responsible for pushing forward short, medium and long term harbourfront enhancement initiatives and co-ordinating and monitoring their implementation, including the identification of works and management agents, with government departments and any other concerned parties. Amongst others, PAS(H) oversees the implementation of projects under the \$500 million dedicated funding announced in January 2017, and the \$6 billion funding announced in the 2019-20 Budget. PAS(H) also spearheads and promotes active engagement with stakeholders and the public during different stages of the harbourfront enhancement initiatives and reports on progress to HC and its Task Forces. PAS(H) is also responsible for providing policy inputs and assessing applications for premium waiver on pedestrian links proposed by the private sector outside Kowloon East pilot scheme.

Schedule of Responsibilities of the Existing Assistant Director/Survey and Mapping in the Lands Department

Assistant Director/Survey and Mapping (AD/SM at D2) heads the Headquarters Division, Land Information Centre, New Territories Survey Division and Urban Survey Division and assists the Deputy Director/Survey and Mapping in formulating and implementing policies relating to land boundary survey, mapping, geographic information system (GIS), positioning infrastructure, photogrammetric and aerial survey. He is responsible for the human resources plans, staff training and development and serves as head of grade of all technical and supporting staff. He oversees the applications of new technologies such as mobile mapping system, unmanned aerial survey, laser scanning, application programming interface, etc. with a view to enhancing work efficiency and providing better services. The post is hard pressed in recent years to oversee the support on survey, mapping and spatial data analysis in Lands Department's big ticket projects such as increasing land supply, resumption in various New Development Areas, land control and lease enforcement, etc. He is also overseeing a pilot project for Building Information Modelling (BIM) adoption, sharable BIM data, BIM data repository and three- dimensional digital map with BIM use context in Kwu Tung North/Fanling North New Development Area.

2. Apart from the above, he has to keep close liaison with government bureaux/departments where survey and cartographic staff are seconded to on survey, cartographic and GIS matters/areas which have common interests. He keeps close communication with the seconded Chief Land Surveyors (D1 post)^{Note} to align the development of survey and GIS matters and to avoid the duplication of work.

Note Two Chief Land Surveyors are seconded to Civil Engineering and Development Department and Highways Department. They keep AD/SM updated of the latest development of surveying and GIS that have common interest and areas of collaboration such as data sharing, data standard, specifications, integration of GIS with BIM, etc.