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#### **Panel on Development**

Meeting on 5 May 2014

#### Background brief on the pilot study on the use of underground space

#### Purpose

This paper provides background information on the proposed pilot study on the use of underground space<sup>1</sup> as well as summarizes the views and concerns expressed by Members during past discussions on the subject at the meetings of the Panel on Development ("DEV Panel") and the Legislative Council.

#### Background

2. Initiatives to increase land supply were introduced under the 2010-2011 and 2011-2012 Policy Addresses to meet the strong housing demands of members of the public. When revealing such initiatives under the 2010-2011 Policy Address<sup>2</sup>, the then Chief Executive ("CE") announced that in order to generate more land in the long run, the Administration would consult the public on the proposals of reclamation on an appropriate scale outside Victoria Harbour and developing caverns and underground space. Under the 2011-2012 Policy Address, two of the six measures<sup>3</sup> identified for expanding land resources were to explore the option of reclamation on an appropriate scale

<sup>&</sup>lt;sup>1</sup> Underground space generally encompasses purpose-built man-made spaces formed by large-scale excavations in rock as well as other large basement-type excavations formed by cut-and-cover methods.

<sup>&</sup>lt;sup>2</sup> The initiatives to increase land supply under the 2010-2011 Policy Address included rezoning about 30 hectares of land for residential use, fine-tuning land supply arrangements, speeding up infrastructure construction at the Kai Tak Development Area, setting up a Steering Committee on Housing Land Supply, etc.

<sup>&</sup>lt;sup>3</sup> The other measures were: release of industrial land for non-industrial use, use of green belt sites, review of "Government, Institution or Community" sites and conversion of agricultural land.

outside Victoria Harbour, and to actively explore the use of rock caverns to reprovision existing public facilities so as to release the sites for housing and other uses.

## Study on Enhancing Land Supply Strategy -- Reclamation outside Victoria Harbour and Rock Cavern Development

3. According to the findings of the "Study on the Enhanced Use of Underground Space in Hong Kong" by the Civil Engineering and Development Department, Hong Kong was particularly suitable for developing rock caverns from the geological perspective. When the DEV Panel was briefed on the Administration's plan to commission a consultancy study on enhancing land supply strategy to identify potential reclamation sites outside Victoria Harbour and suitable existing facilities for relocating to rock caverns on 24 May 2011, and then on a two-stage public engagement exercise under the study on 10 March 2012, 23 April 2013 and 1 June 2013, the focus of discussion on developing underground space had been on rock cavern development.

## Study on the development of underground space in urbanized areas

4. In his 2013 Policy Address, CE announced that the Administration would further explore the potential of developing underground space in the urbanized areas of Hong Kong. This would include studying the possibility of linking up the underground space of existing or planned structures in the urban areas.

## Question raised at a Council meeting

5. At the Council meeting of 3 July 2013, Hon Jeffrey LAM Kin-fung raised a written question on the progress of the study on the development of underground space and the Administration's preliminary thinking about such development. The Administration advised that it had preliminarily collected and analyzed overseas and local examples of using underground space in the urban areas to identify the development opportunities and constraints of the relevant projects. In order to develop underground space strategically, the Administration needed to further review the relevant policies, regulations and administrative measures. The question and the full reply are given in **Appendix I.** 

6. CE further announced in his 2014 Policy Address that the Administration had commenced a study to identify districts with the potential for developing urban underground space, with a view to increasing usable space and enhancing

connectivity in the urban areas. Meanwhile, the Administration was preparing a pilot study covering four selected strategic urban areas, namely Tsim Sha Tsui West, Causeway Bay, Happy Valley and Admiralty/Wan Chai.

## Discussion by the Panel on Development

7. During the discussion of the DEV Panel on the policy initiatives of the Development Bureau under the 2014 Policy Address, some members expressed the view that it might be more effective to carry out the pilot study on underground space in the new development areas given that there were already many commercial developments in the underground space in the built-up areas. The Administration advised that most of the underground space to be covered by the pilot study was situated at Government sites and had considerable development potentials.

8. Some members expressed support for the development of underground space to link up buildings and facilities in busy areas on the ground that this would help create more space as well as enhance the connectivity, thus bringing more business opportunities to the shops above ground. They held the view that, with the experience gained from the construction of the Mass Transit Railway, the Administration should be able to resolve the land title issue concerning the ownership of underground space beneath private developments. While the Administration acknowledged that there would be challenges ahead in the process of developing underground space, it said there were ways to deal with the land title issue and it would carry out detailed studies on the issue in due course.

## Latest development

9. The Administration will seek DEV Panel's support for upgrading the pilot study on underground space development in selected strategic urban areas (Tsim Sha Tsui West, Causeway Bay, Happy Valley and Admiralty/Wan Chai) to Category A at the meeting on 5 May 2014.

10. A list of relevant papers with their hyperlinks is in Appendix II.

Council Business Division 1 Legislative Council Secretariat 28 April 2014

## Appendix I

#### Written question raised by Hon Jeffrey LAM Kin-fung on development of underground space at the Council meeting of 3 July 2013

#### Question:

The Chief Executive has mentioned in the 2013 Policy Address that Hong Kong can examine the development of underground spaces as a source of land supply. Regarding the development of underground spaces (excluding rock caverns), will the Government inform this Council:

- (a) whether the Government has commenced any feasibility study or planning work on the development of underground spaces at various selected sites; if so, of the details; if not, the reasons for that;
- (b) whether the Government has made reference to the examples of developing underground spaces into pedestrianised streets, car parks and stadiums in foreign countries; whether it has assessed the types of uses of the underground spaces which are more suitable to be developed in Hong Kong; and
- (c) whether the Government will conduct studies on the development of underground shopping malls/business cities in those major development projects (including the West Kowloon Cultural District and the Kai Tak Development area) the works for which have not yet commenced at present?

Reply:

President,

Nowadays, the urban areas in Hong Kong have been densely developed with very limited land for new developments. The shortage in land supply has affected our competitiveness. In view of this, the Chief Executive has suggested in the 2013 Policy Address to develop underground spaces in the urban areas as one of the viable sources of land supply.

In fact, Hong Kong has been using underground spaces for public and commercial facilities for many years. However, most of them were associated with individual development projects, such as basements and car parks of shopping centres, as well as Mass Transit Railway (MTR) station development.

In recent years, a relatively large scale example is the underground passage connecting the Tsim Sha Tsui and Tsim Sha Tsui East MTR stations and the surrounding shopping centres. However, in order to develop underground spaces strategically, we need to further review the relevant policies, regulations and administrative measures with a view to enhancing the use of underground space resources more systematically.

Our answers to the three parts of the question are as follows:

(a) and (b)

Since the Chief Executive suggested in the 2013 Policy Address to develop underground spaces in the urban areas as a viable source of land supply, we have been actively preparing for commencing a study on "Underground Space Development in the Urban Areas" to further explore the potential of developing underground spaces in the built-up areas of Hong Kong. We have preliminarily collected and analysed some overseas and local examples of using underground spaces in the urban areas to identify the development opportunities and constraints of the relevant projects. We are now drafting the consultancy brief based on the main objectives of the study, with a view to creating more urban space for development, and enhancing connectivity of the urban areas (including new towns) through linking of existing and planned buildings and facilities with underground developments. The study will identify some representative areas for detailed assessments. We will soon conduct selection of consultants, and plan to commence the study the soonest in end 2013. Through the study, we will explore the suitable uses for further developing underground spaces in the urban areas, including commercial facilities such as shopping arcades, underground streets and car parks etc.

(c) The Government has embodied the element of enhanced use of underground spaces in the planning of the West Kowloon Cultural District (WKCD) and the Kai Tak Development area.

The WKCD Development Plan was based on Foster + Partners' "City Park" Conceptual Plan, in which the cultural and art facilities are integrated with other facilities with a view to increasing the vibrancy of the cultural district. Taking into account the need for optimising the use of land resources, the Development Plan places the vehicular transport network of the WKCD underground.

With a flexible use of underground spaces, more above ground spaces could be made available for public enjoyment and pedestrian passage.

The statutory planning procedures of the Development Plan have been completed in January this year. The approved Development Plan has incorporated the views and suggestions given by the public and the stakeholders in the public engagement exercise.

As regards the Kai Tak Development area, in order to enhance the community and cultural linkage with the nearby areas, the Government has proposed to develop two Underground Shopping Streets in the "Kai Tak Outline Zoning Plan" to connect Kowloon City and San Po Kong with the Kai Tak Station of the Shatin to Central Link under construction with a view to enhancing the integration of the new and the old districts. The Underground Shopping Streets are at the planning stage and the implementation mechanism needs to be further studied.

# Appendix II

# Pilot study on underground space development in selected strategic urban areas

# List of relevant papers

Date	Meeting/Event	References
24 May 2011	Panel on Development	Administration's paper on increasing land supply by reclamation and rock cavern development (LC Paper No. CB(1)2205/10-11(05)) http://www.legco.gov.hk/yr10-11/english/pa nels/dev/papers/dev0524cb1-2205-5-e.pdf Administration's paper on findings of the study on the enhanced use of underground space in Hong Kong (LC Paper No. CB(1)2205/10-11(06)) http://www.legco.gov.hk/yr10-11/english/pa nels/dev/papers/dev0524cb1-2205-6-e.pdf Minutes of meeting (LC Paper No. CB(1)265/11-12) http://www.legco.gov.hk/yr10-11/english/ panels/dev/minutes/dev20110524.pdf
22 January 2013	Panel on Development	Administration's paper on 2013 Policy Address Policy Initiatives of Development Bureau (LC Paper No. CB(1)428/12-13(03)) http://www.legco.gov.hk/yr12-13/english/pa nels/dev/papers/dev0122cb1-428-3-e.pdf Address by the Chief Executive at the Legislative Council meeting on 16 January 2013 "Seek Change, Maintain Stability, Serve the People with Pragmatism" http://www.legco.gov.hk/yr12-13/english/ panels/1213policy-e.pdf

Date	Meeting/Event	References
		Minutes of meeting (LC Paper No. CB(1)735/12-13) http://www.legco.gov.hk/yr12-13/english/ panels/dev/minutes/dev20130122.pdf
3 July 2013	Legislative Council meeting a written question on development of underground spaces	Official Record of Proceedings (Page 14979 to 14981) <u>http://www.legco.gov.hk/yr12-13/english/</u> <u>counmtg/hansard/cm0703-translate-e.pdf</u>
28 January 2014	Panel on Development	Administration's paper on initiatives of Development Bureau in the 2014 Policy Address and Policy Agenda (LC Paper No. CB(1)741/13-14(03)) http://www.legco.gov.hk/yr13-14/english/pa nels/dev/papers/dev0128cb1-741-3-e.pdf Address by the Chief Executive at the Legislative Council meeting on 15 January 2014 "Support the Needy, Let Youth Flourish, Unleash Hong Kong's Potential" http://www.legco.gov.hk/yr13-14/english/ panels/1314policy-e.pdf Minutes of meeting (LC Paper No. CB(1)1246/13-14) http://www.legco.gov.hk/yr13-14/english/ panels/dev/minutes/dev20140128.pdf