

YOUNG PLANNING PROFESSIONALS' THINK DEEP PROGRAMME
CALL FOR COORDINATORS
HONG KONG ROCKS –
DEEP PLANNING FOR STRATEGIC CAVERN DEVELOPMENT

14-18 OCTOBER 2024

1. BACKGROUND OF THE PROGRAMME

ISOCARP in partnership with **ITACUS** (International Tunnelling and Underground Space Association's Committee on Underground Space) have recently made an agreement with the Geotechnical Division of the **Hong Kong Institution of Engineers HKIEGD** – which entails a Young Planning Professionals (YPP) – **Young Professionals Think Deep Program (YPTDP)** Workshop. The Young Planning Professionals Programme is a crucial component of ISOCARP's dedication to promote and enhance the planning profession and commitment to facilitate knowledge for better cities with the young generations. The Programme facilitates a unique creative spirit within the Society, and it has become a source of new ideas, innovation and rejuvenation not only for the Society but also for our partners; and has made a huge impact on participants' professional lives, in the name of the universal vision of promoting and enhancing the planning profession. ITACUS sees YPP programme as an ideal example of how to actively involve ITA Young Members and make them part of a cross-disciplinary cooperation with ISOCARP Young Planners. ITACUS is therefore actively setting up of a YPTDP for young members, working together with ISOCARP. The core idea is to combine the proven methodology of ISOCARP's YPP with the concept of working crossdisciplinarity on underground planning issues. According to this tradition, the Hong Kong YPP/YPTDP workshop on “**Hong Kong Rocks – Deep Planning for Strategic Cavern Development**” will be offered this year again between 14 and 18 of October in Hong Kong Special Administrative Region, The People's Republic of China. At the same time, this event is intended to become a continuation of the previously organized series of workshops, which took place in 2016, 2017 and 2023, and were focusing on the Glasgow Waterfront, Wroclaw West End and Gdansk's Polish Hook Areas.

2. BACKGROUND OF THE HONG KONG CASE

Hong Kong is a high-density compact city with limited developable land. Its topographical setting with steep natural hillsides significantly limits the ease and extent for urban expansion. There is a pressing need for exploring new land resources for sustainable city development. With favourable geological setting in Hong Kong, rock caverns serve as a viable source of land supply, which can provide solution space for a broad variety of land uses. Many successful local and overseas examples have demonstrated that cavern is suitable to accommodate a wide spectrum of facilities (Figure 1).

CAVERN MASTER PLAN OF HONG KONG

To unleash the potential of cavern development, the Government of the Hong Kong Special Administrative Region (HKSAR) has produced a territory-wide Cavern Master Plan¹ (CMP) to guide and facilitate wider application of cavern development in Hong Kong for both public and private sectors (Figure 2). The Cavern Master Plan delineates 48 Strategic Cavern Areas (SCVAs) that are physically well situated for cavern development and provides general guidelines on project implementation, which can enable project proponents to identify suitable cavern sites for development. All the SCVAs identified are in close proximity to existing urban areas with good supporting infrastructure network and are sufficiently large to enable accommodation of multiple cavern facilities. These areas offer an additional source of solution space that is versatile for a wide range of land uses, e.g. for accommodating new commercial, industrial, community or municipal facilities, subject to the need of the society.

CAVERN DEVELOPMENT VISION: COMBINED INDUSTRIAL-COMMERCIAL USES

By and large, caverns in Hong Kong are still primarily constructed with the intention of accommodating public facilities. However, it is worth noting that globally there are noteworthy instances of cavern development for commercial purposes such as hotels, stadiums, and museums, as well as for industrial applications like underground quarrying. Through meticulous planning and careful site selection, cavern development in Hong Kong, embracing the formation of multiple caverns into a cavern complex or network, holds strong potential to accommodate a combination of commercial and industrial uses. Particularly in terms of industrial uses, the operation of an underground quarry associated with concrete batching and asphalt production operations, etc. can be a self-financing or even profitable business and is likely a good choice for the future cavern development strategy in Hong Kong. The formed space after the end of quarrying operation can then be utilised for commercial development.

¹ <https://www.cedd.gov.hk/eng/topics-in-focus/index-id-27.html>

AN EXAMPLE OF STRATEGIC UNDERGROUND QUARRY-CUM-CAVERN DEVELOPMENT IN HONG KONG

Echoing with the above cavern development vision, the HKSAR Government has completed a technical study to establish the technical feasibility and formulate an implementation model in the pursuit of underground quarrying-cum-cavern development in Hong Kong. Based on the CMP and other considerations, three sites have been selected for launching the pilot underground quarrying schemes. Currently, consultancy studies are underway for design of underground quarries at these sites, with the ultimate goal of forming usable cavern space to accommodate a variety of public or private sector facilities that could bring about benefits in terms of long-term land supply. These projects are full of challenges and multi-disciplinary professional input is required given the need for considering a host of factors including engineering, planning, environmental, logistics, operational and financial requirements.

3. PROJECT DESCRIPTION

The Young Professional Think Deep Programme to be hosted in Hong Kong is a 5-day comprehensive workshop. Participants from overseas and Hong Kong will collaborate to complete a fascinating capstone project on design of an industrial / a commercial / a combined industrial-commercial cavern development in Hong Kong, with reference to the above example of underground quarry-cum-cavern development study.

WORKSHOP METHODOLOGY

Participants will be assigned into groups, each comprising 5-6 participants from a balanced professional background. Every group will be provided with a selected site for completing the project. The participants will be provided with some reference materials about the site and they are expected to carry out information search by themselves. Site visits will be arranged to (i) the selected site, and (ii) a cavern construction site during the course of workshop to help participants getting familiarized with the exercise as well as on specific topics such as quarry operation and cavern construction. Experts and mentors from overseas and local will also share the knowledge about the planning of underground space and experiences on local and overseas projects.

DELIVERABLES

Towards the end of the workshop, each group is required to present their deliverables including (i) quarrying and cavern design, (ii) short term, medium term and long-term land uses, (iii) suggested operation mechanisms, and (iv) contract preparation and procurement mechanism, substantiated with detailed thoughts or reasons behind. A judging panel formed by overseas and local experts will give marks to each group's deliverables and the winning teams will be presented with awards. The ideas collected from the participants will be put into a

report for sharing with the relevant government departments undertaking the existing underground quarrying contracts. A preliminary programme of the 5-day workshop is given below for reference.

BASIC SCHEDULE – WORK ON SITE

	14/10 (Mon)	15/10 (Tue)	16/10 (Wed)	17/10 (Thu)	18/10 (Fri)
Morning	Briefing & training	Site visit [selected site]	Site visit [quarrying/cavern construction site]	Project Session 4	Project Session 6
Afternoon	Project Session 1	Project Session 2	Project Session 3	Project Session 5	Final Presentation
Evening	Technical seminar on underground space applications				Celebration Dinner

4. ELIGIBILITY AND APPLICATION

The call for WORKSHOP COORDINATORS is open to ISOCARP global members and all ITA members only. A team of at least three international workshop coordinators will be selected from among the applications. The selected Coordinators will have a chance to work with local coordinators. ISOCARP and ITACUS welcomes applications from full members with proven expertise in urban design, planning and civil engineering, underground space specialists with academic experience and/or teaching experience in similar professional programmes, with no outstanding membership fees. The most effective composition of the team will be considered for the final selection.

Candidates complying with the above criteria must submit through the Online Application Form:

- Clear statement of intent explaining why you want to apply. Please be specific and refer to prior workshop coordination or participation experience (maximum 1 page)
- Curriculum Vitae pointing out the relevant experience (please use the ISOCARP Template)

Please **use your last name** in the file names (*cv_example-name.pdf*) before you upload the documents.

5. REQUIRED TASKS AND EXPECTED RESULTS

Each coordinator will spend 5 full days with the young professionals’ group between 14 and 18 October. Within these dates, there may be a necessity of conducting meetings with local hosts and press. It is intended that the

workshop will gather 12 international and at least as many local young professionals, who are not older than 35 years and who offer a keen interest in the workshop theme. The required tasks of the workshop coordinators are as follows:

- coordination of the framework, the scientific and professional content of the workshop theme
- guidance on the work of the young professionals throughout the workshop, stimulate discussions, instruct on the presentation format
- guidance on the public hearing
- coordination of the workshop publication

The workshop results are encouraged to be presented during the 61st ISOCARP World Planning Congress in 2025.

6. CONTRIBUTION AND EXPENSES

The selected coordinators will be provided a reimbursement for the international travel (return, economic fare) with a maximum of up to €1000 including visa expenses. Travel expenses will be reimbursed upon submitted original receipts, tickets, boarding passes, etc. The Programme will take care of in-kind accommodation, full-board and local transportation for the entire duration of the workshop (excluding transfers to and from the airport/stations), within the agreed dates in Hong Kong. The selected workshop coordinators will be asked to arrange the international trip on their own and arrive not later than 13 October. Transportation from airport to hotel and vice versa will be arranged by the coordinators themselves. Coordinators are welcome to stay in Hong Kong longer than 19 October on their own expense. All selected coordinators must take care of their own health and travel insurance.

7. KEY DATES

Issue of Call	25 th June 2024
Deadline - Reception of applications (Coordinators and Participants)	21 st July 2024
Communication of selection results (Coordinators)	31 st July 2024
Selection and Communication of results (Participants)	5 th August 2024
Travel arrangements and Procedures	31 st August 2024
Arrival to Hong Kong (the latest)	Sun 13 th Oct 2024
Departure	Sat 19 th Oct 2024

QUESTIONS

Any questions during these procedures and regarding the topic, on-site logistics and travel arrangement should be sent to ISOCARP Board Member and Director YPP, Rolf Schuett: schuett@isocarp.org.

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REFERENCES

- Tsang, W. H., Ho, Y. K. & Chan, C. Y. K. (2022). An Unprecedented Land Supply Means in Hong Kong: Under-ground Quarrying-cum-Cavern Development. Proceedings of The HKIE Geotechnical Division 42nd Annual Seminar: A New Era of Metropolis and Infrastructure Developments in Hong Kong, Challenges and Opportunities to Geotechnical Engineering, May 13, 2022. DOI: <https://doi.org/10.21467/proceedings.133.36>
- Ho, Y. K., Tsang, W. H. & Chan, C. C. (2020). Rock cavern development in Hong Kong: past, present and future. Proceedings of the Institution of Civil Engineers - Civil Engineering (Special Issue on Underground Construction), <https://doi.org/10.1680/jci.19.00031>.

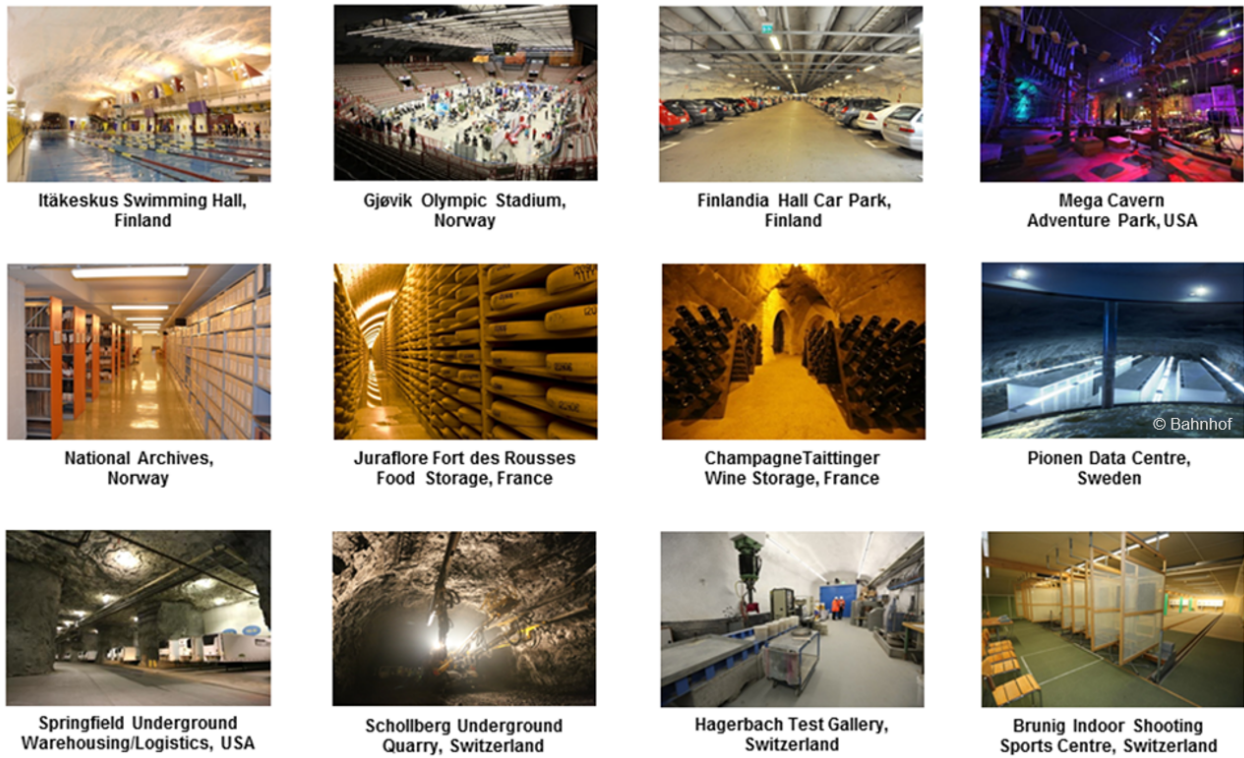
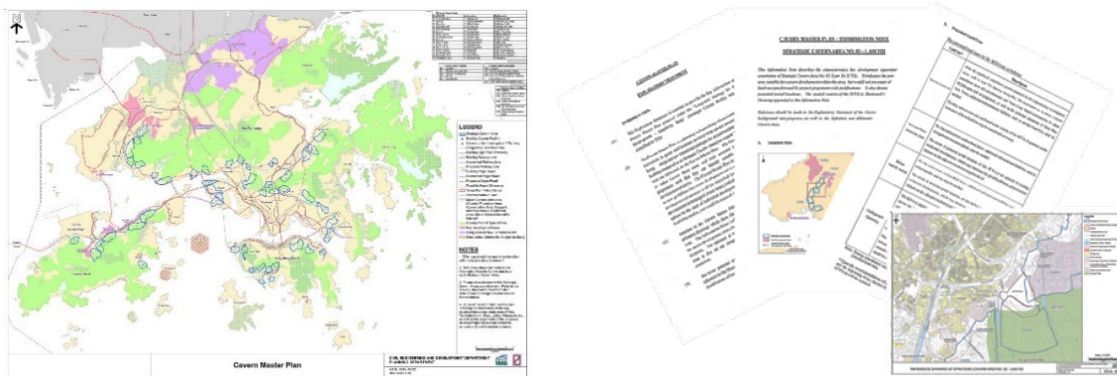


Figure 1. Examples of cavern development



Cavern Master Plan

Explanatory Statement and Information Notes

Figure 2. Cavern Master Plan of Hong Kong