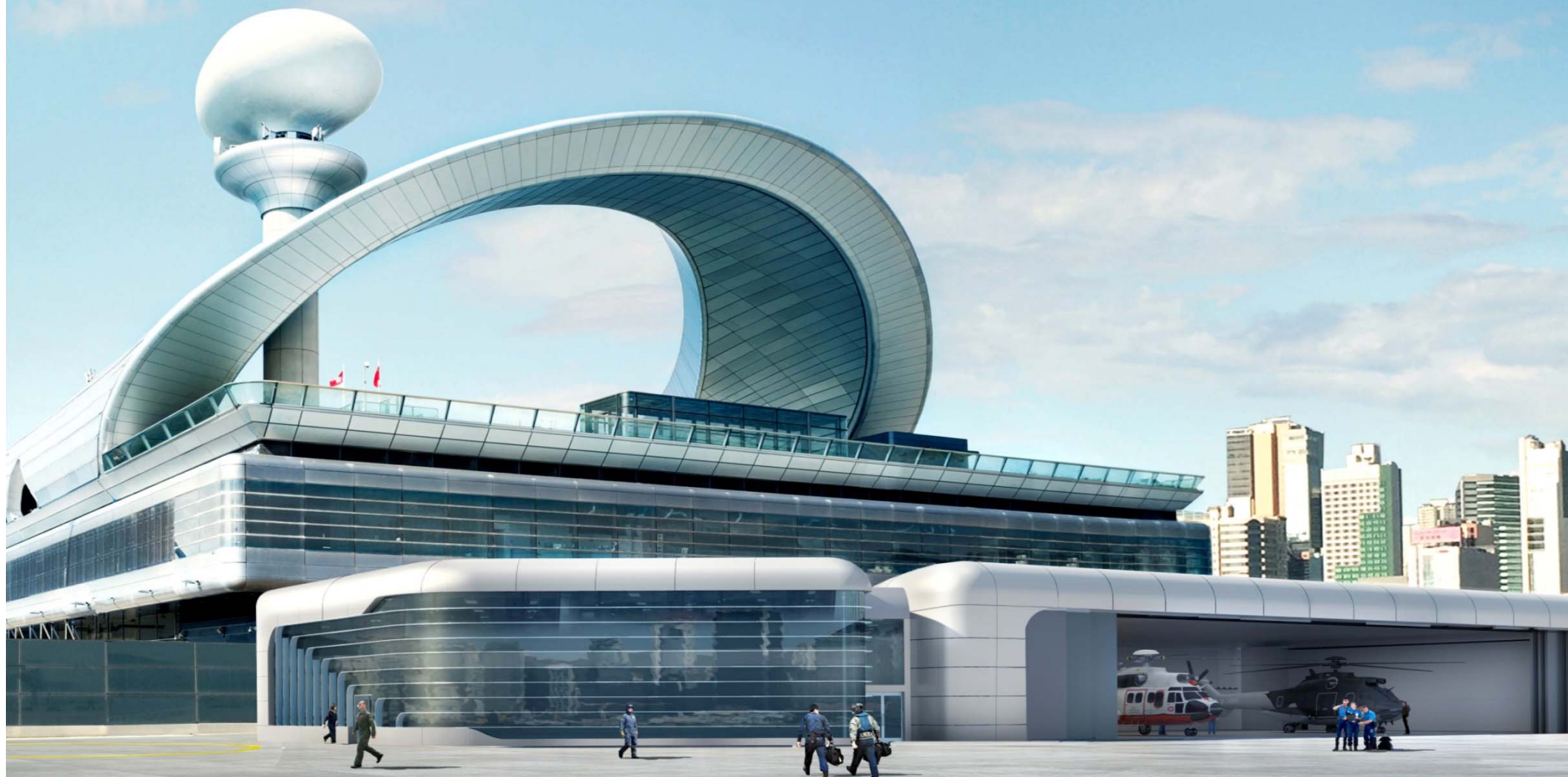


Proposed Establishment of Government Flying Service Kai Tak Division



土木工程拓展署
Civil Engineering and
Development Department

ARUP

AGC

DESIGN LTD

architecture
urban design
interior

- Provide responses to Members' comments raised in the last Task Force meeting on the proposed establishment of the GFS Kai Tak Division
- Invite Members' views on the proposal as input to the detailed design stage

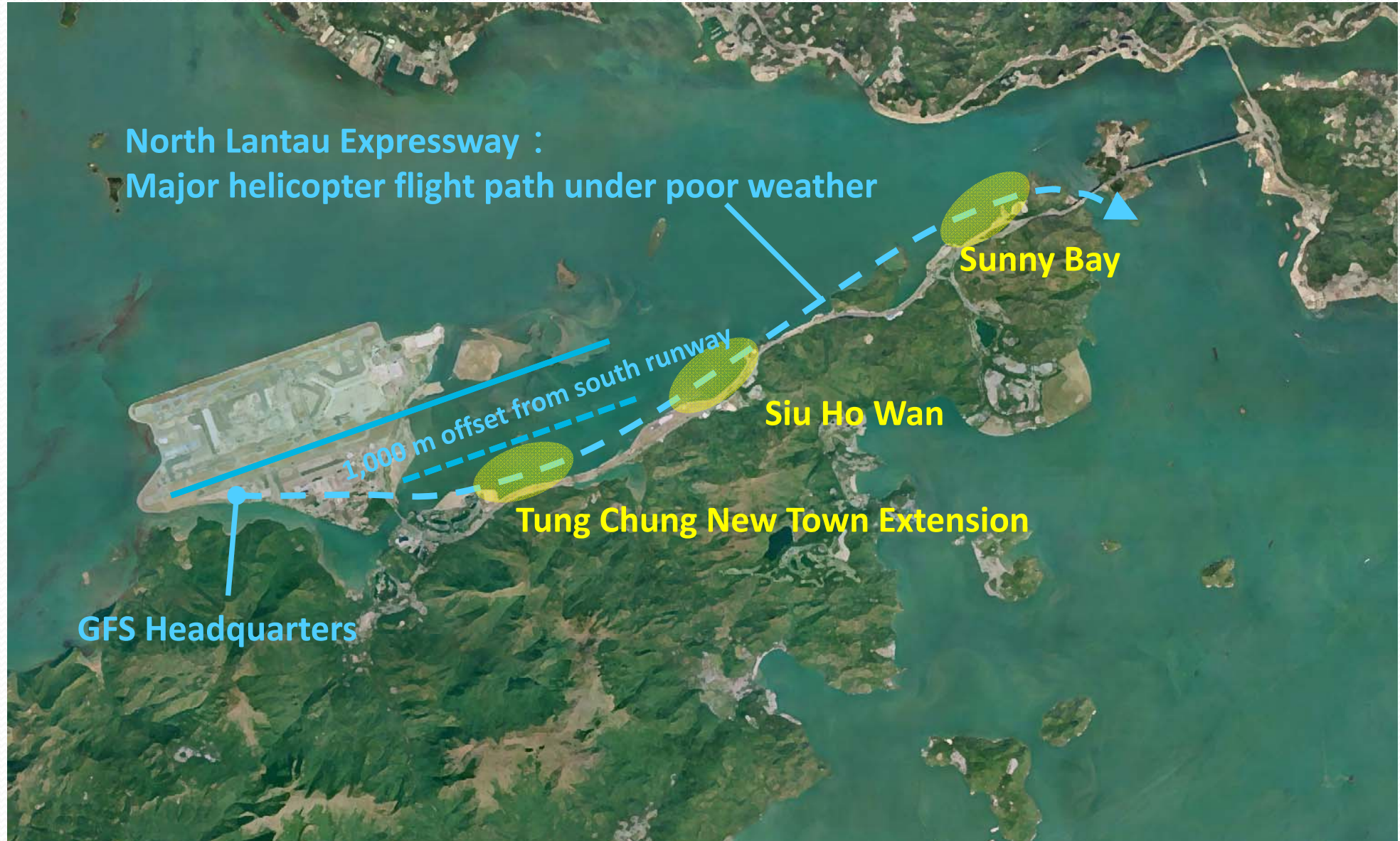
- Project Background
- GFS' Operations
- Follow-up Actions since Last TF Meeting





Project Background

Conflict between Existing GFS Flight Path and North Lantau Development



Need of GFS Division away from Lantau

- Unleash the development potentials of the northern shore of Lantau, in particular Tung Chung New Town Extension
- Maintain GFS' emergency operation at its current level





GFS' Operations



Organization

HKSARG



Security Bureau



AMS
&
CAS



Correctional
Services
Department



Customs
and Excise
Department



Hong Kong
Police Force



Government
Flying
Service



Fire
Services
Department



Immigration
Department

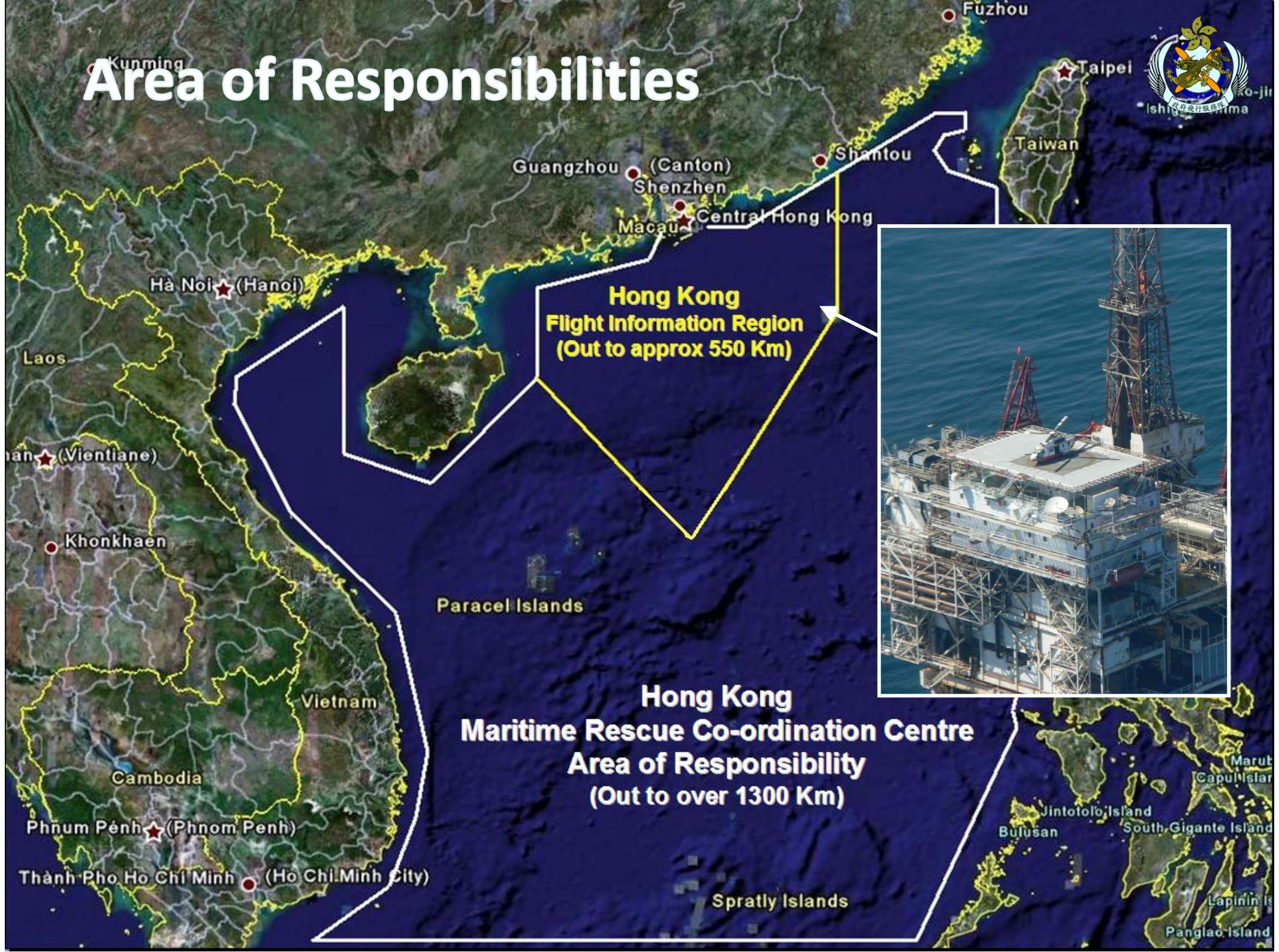


Area of Responsibilities

Normal Boundary of Flying (within HK)



Area of Responsibilities



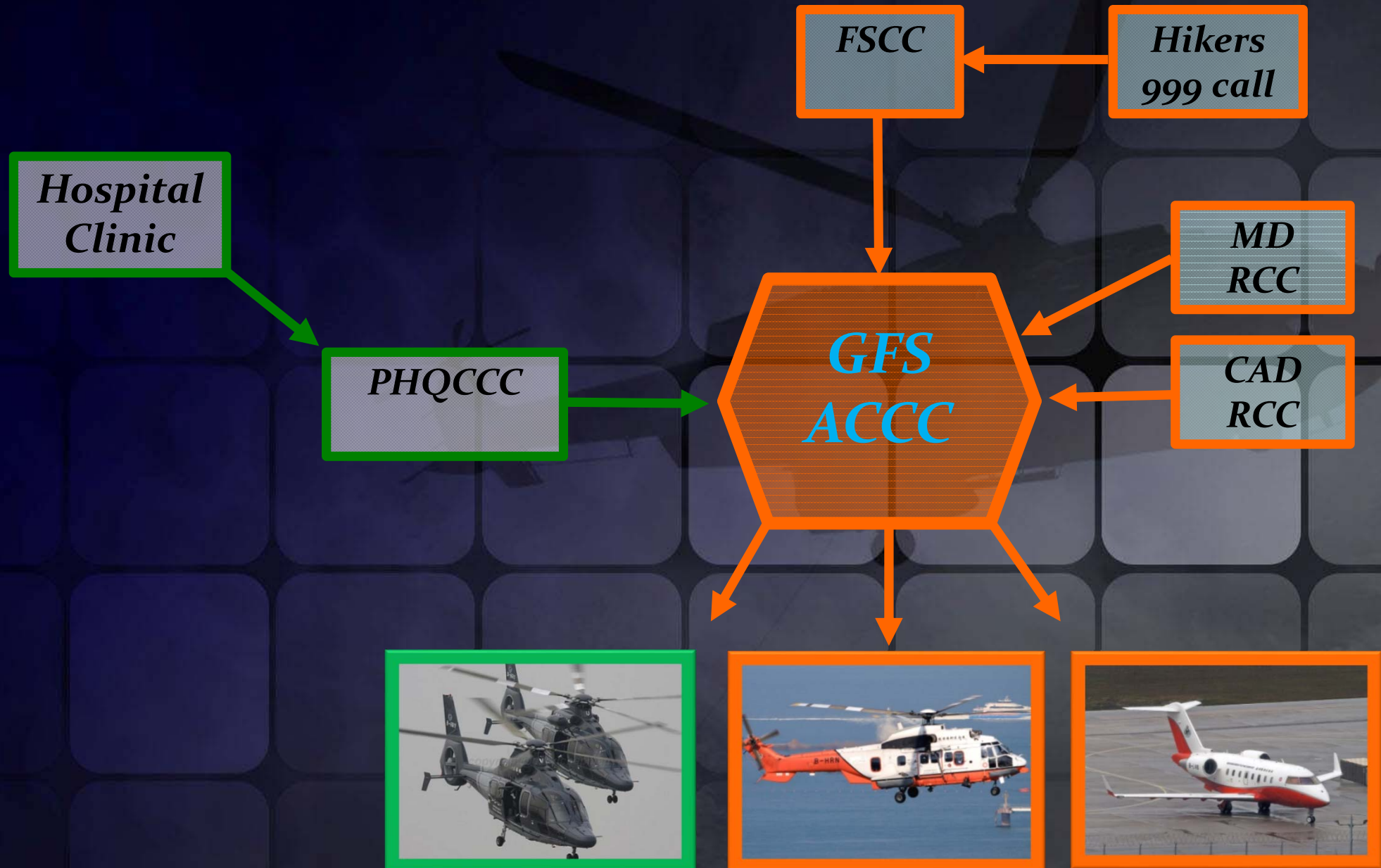


Our Commitments

- **Emergency Response**
 - *Search and Rescue (In-shore and Off-shore)*
 - *Air Ambulance/Highway Rescue*
 - *Internal Security*
 - *Firefighting*
- **General Support to HKSARG**
 - *Passengers Transfer*
 - *Aerial Survey*
 - *External Load Operations*



Emergency Response





Off-shore Rescue

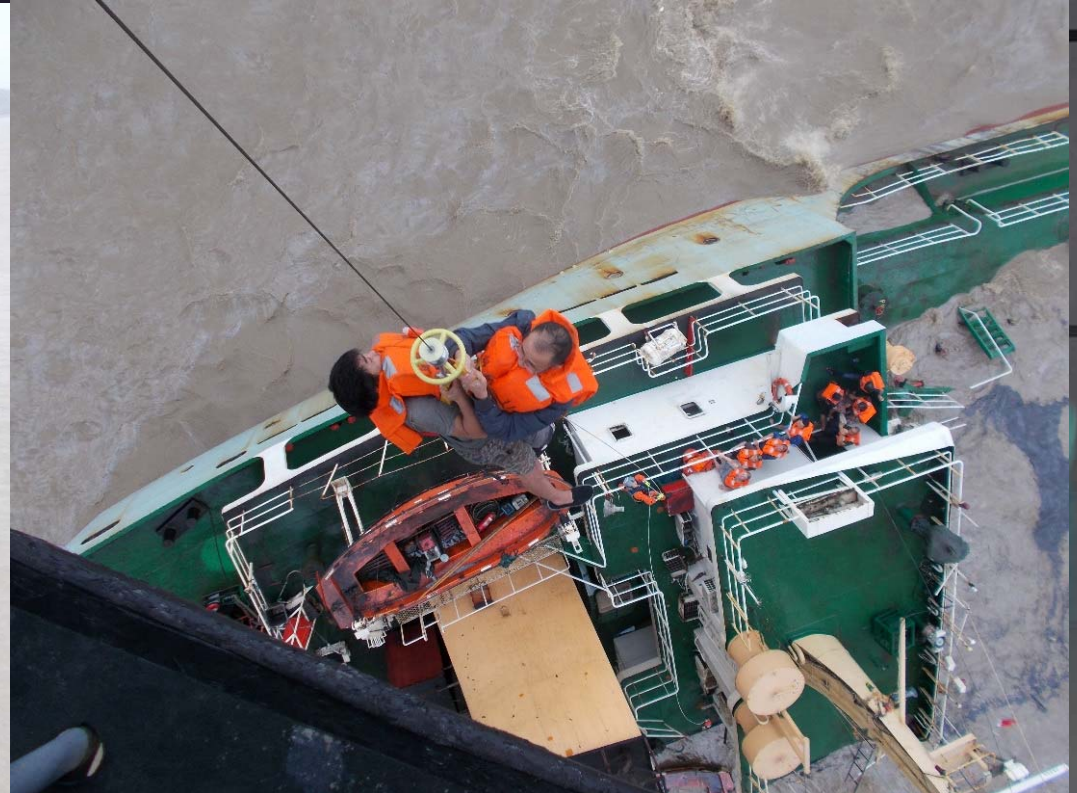
23 August 2017 - Severe Typhoon Hato (強颱風天鴿) reached HK. Typhoon Signal 10 was hoisted, more than 10 ships sank SW of HK.





Off-shore Rescue

Record breaking number of survivors were saved by GFS helicopters that day.





27 August 2017 – STS Pakhar (強烈熱帶風暴帕卡) reached HK. Typhoon Signal 8 was hoisted. A cargo ship 64nm east of HK was in distress. GFS helicopter saved all 11 crew onboard.





27 August 2017 – STS Pakhar



Air Ambulance

- Casualty Evacuation
- Medical Evacuation
- Pre-hospital care to the patient
- Auxiliary Doctors / Nurses
- Paramedics Aircrewmen



Fire Fighting

- **Work with Fire Services Department**
- **Fire tank – 2270 kg water and foam**
- **Fire bucket – 3220 kg water and foam**





Fire Fighting





Internal Security Support

Support Hong Kong Police

- **Counter Terrorist Operations**
- **Anti-smuggling Operations**
- **Anti-illegal immigrants Operations**
- **Aerial Surveillance / Command**
- **Trooping**
- **General Support to Law Enforcement Agencies**

反非法赛车



Performance Pledge

Nature of Callout	Performance Pledge*
Casevac (A / A+ Casevac)	20 mins
SAR (In-shore)	40 mins
SAR (Off-shore)	1 hr (add 30 mins per 50 nm up to 200 nm)
Fire -Fighting	40 mins
Law Enforcement	20 mins

* The Performance Pledges shown are a simplified version. More detail can refer to <http://www.gfs.gov.hk>



Operation Statistics

EVENTS	2013	2014	2015	2016
CASEVAC	2078	2004	1746	1627
FIRE FIGHTING	62	58	58	25
SEARCH AND RESCUE	433	504	585	559
LAW ENFORCEMENT	32	23	21	37
GOVERNMENT TASK	1039	1020	989	1260

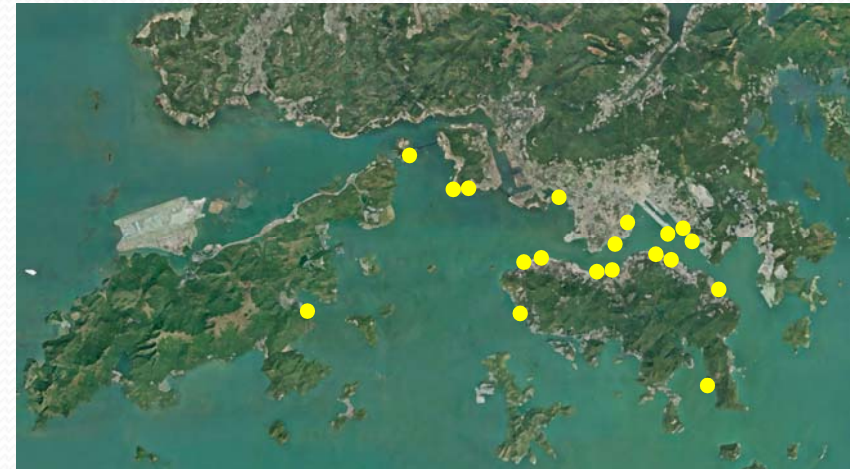


Follow-up Actions since Last TF Meeting

- Follow-up working meeting on 23 Oct 2017 in response to the following issues:
 1. Site selection process of KTD
 2. Helicopter noise impacts
 3. Compatibility with the planned Kai Tak Fantasy initiatives
 4. Public enjoyment of harbourfront area
 5. Marine traffic impact
 6. Major views of DCs
 7. GFS' planned operations in KTD
 8. Cross-boundary heliport operations under co-location arrangement
- Site visit to GFS Chek Lap Kok HQ on 23 Oct 2017



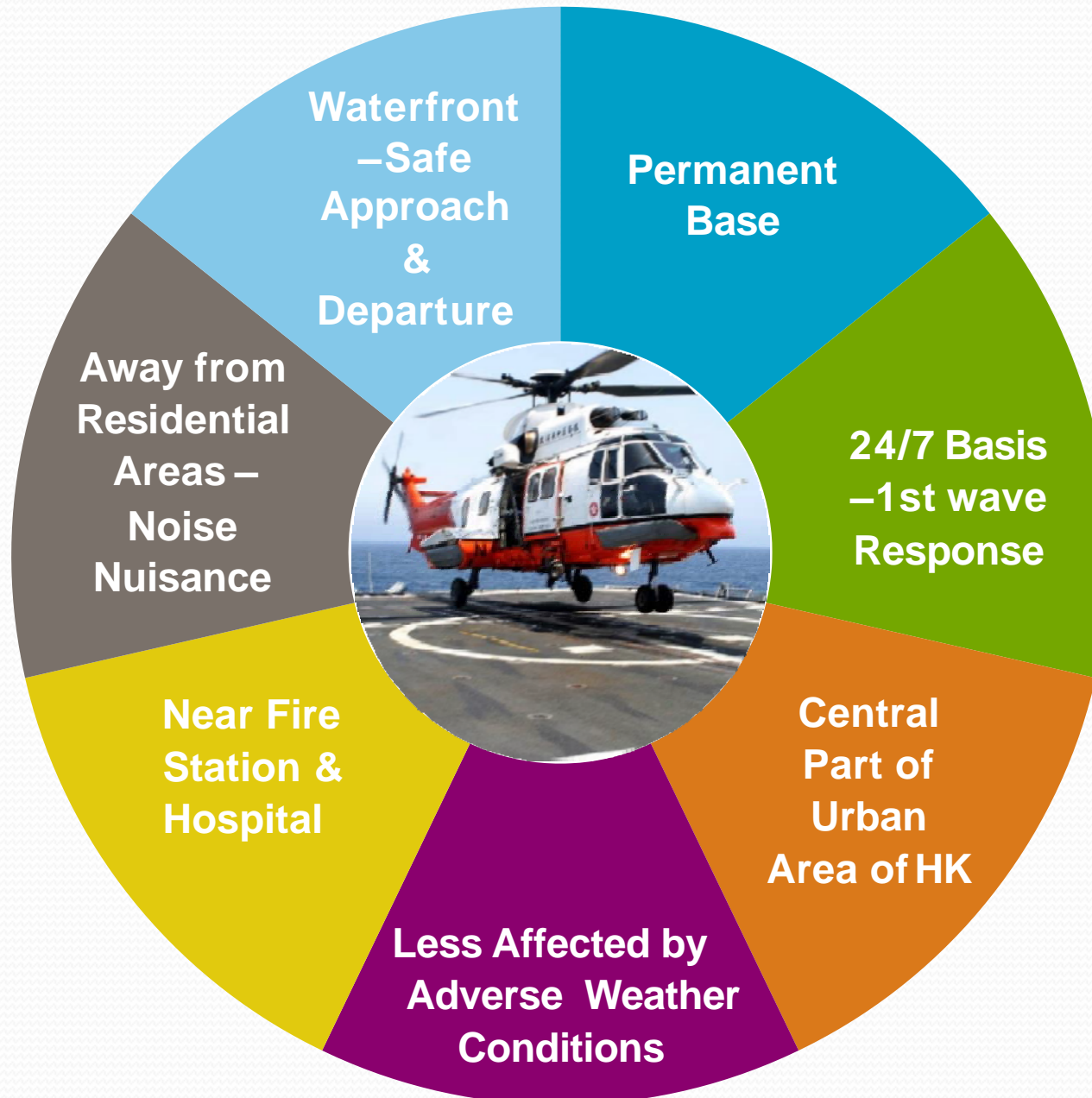
- Summary of responses to following issues:
 1. Site selection process of KTD
 2. Helicopter noise impacts
 3. Compatibility with the planned Kai Tak Fantasy initiatives
 4. Public enjoyment of harbourfront area
 5. Phased development approach





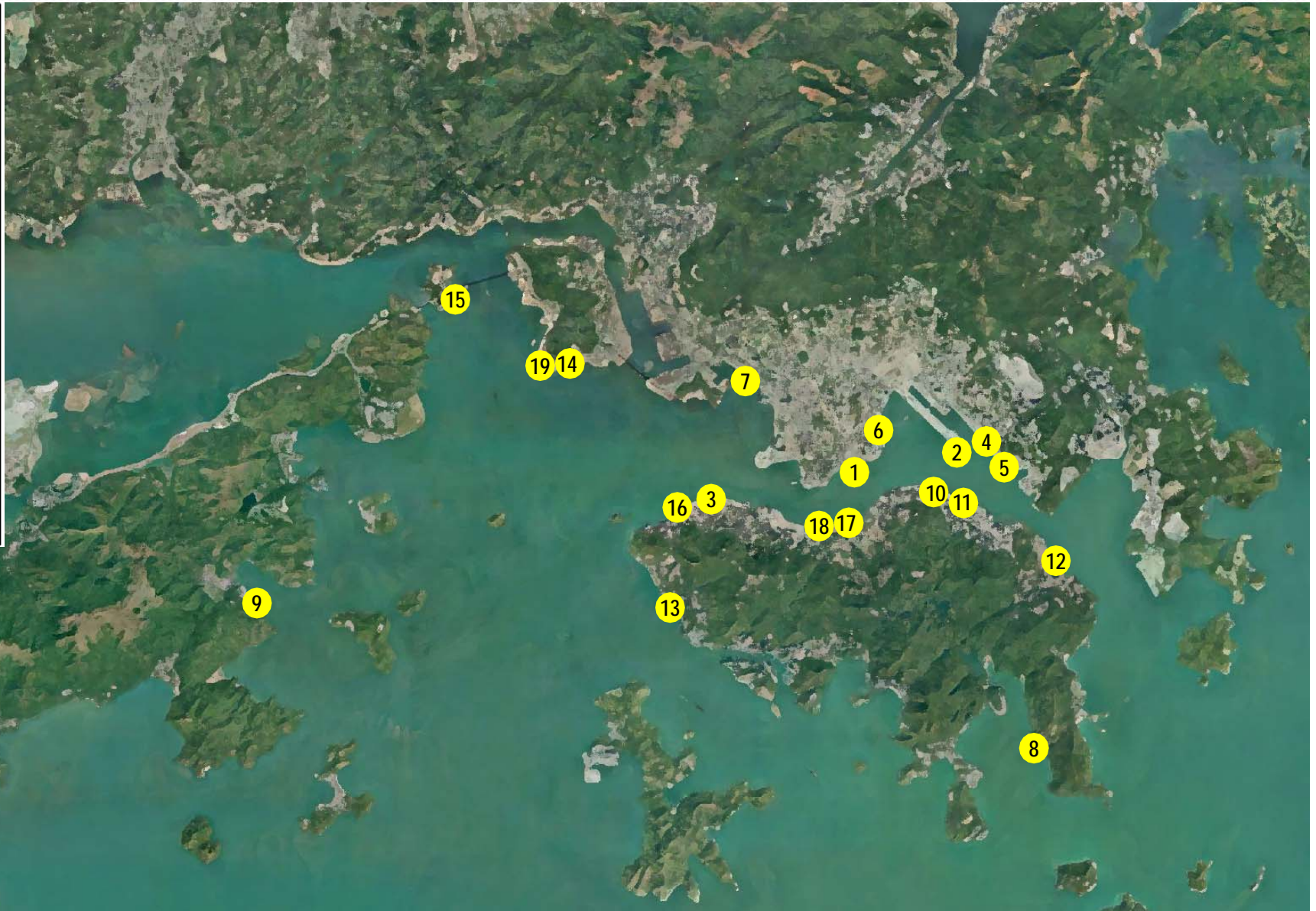
1. Site Selection Process

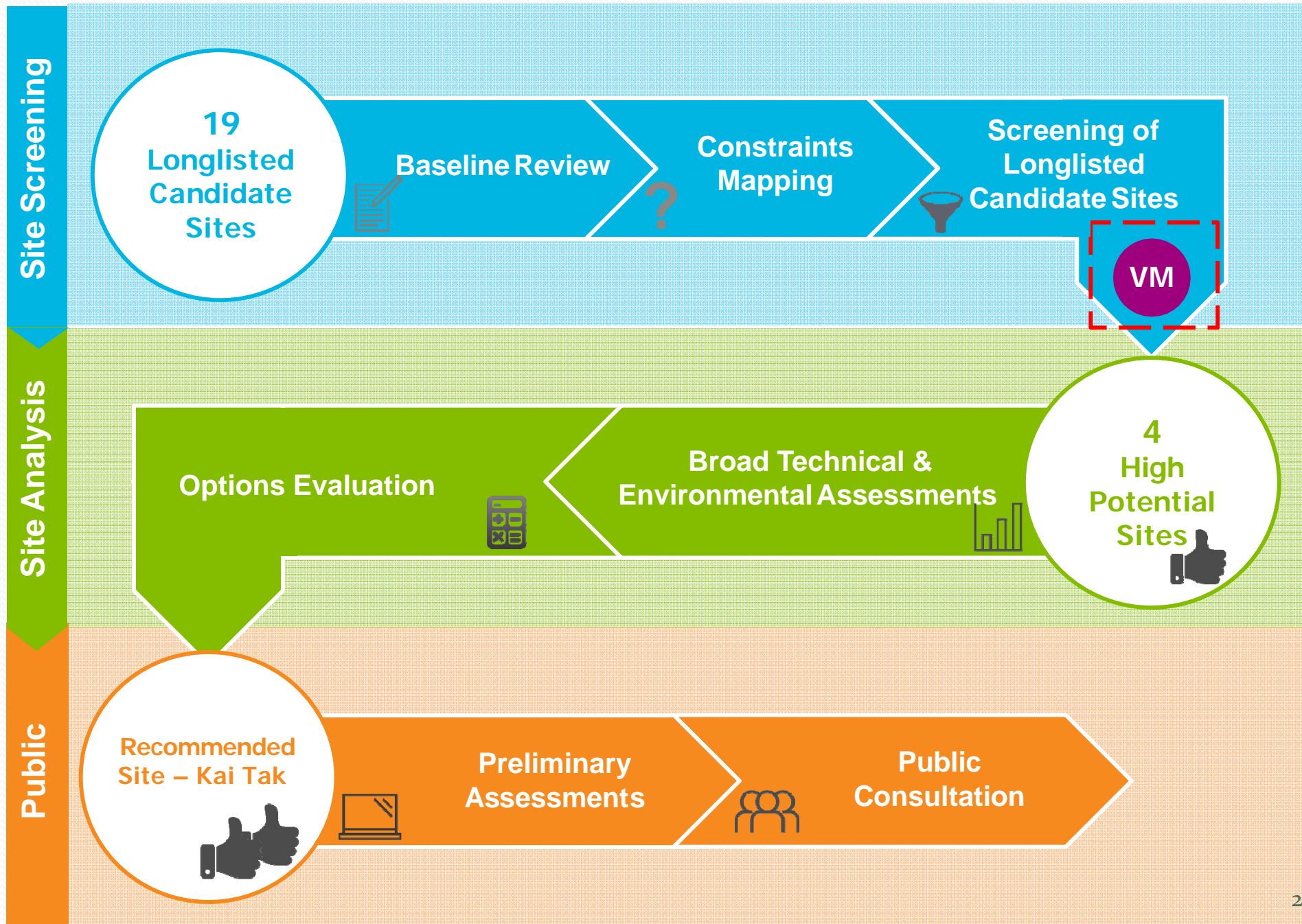
GFS' Requirement



Longlisted Candidate Sites

NO.	LOCATION
1	HUNG HOM
2	EX-KAI TAK RUNWAY
3	SAI YING PUN
4	KWUN TONG
5	CHA KWO LING
6	TO KWA WAN
7	CHEUNG SHA WAN
8	EX-SHEK O QUARRY
9	MUI WO
10	QUARRY BAY-SITE 1
11	QUARRY BAY-SITE 2
12	CHAI WAN
13	CYBERPORT
14	TSING YI SOUTH
15	MA WAN SOUTHEAST
16	WESTERN DISTRICT PUBLIC CARGO WORKING AREA
17	EX-WAN CHAI PUBLIC CARGO WORKING AREA
18	WAN CHAI HELIPAD
19	TSING YI SOUTHWEST





Stage 1 Initial Screening

Site	Determining Factor		
	Site Availability	Environmental and Programme Implication	Confirmed / Committed Development
1 Hung Hom	X	?	X
2 Ex-Kai Tak Runway	✓	✓	?
3 Sai Ying Pun	✓	X	?
4 Kwun Tong	✓	X	✓
5 Cha Kwo Ling	?	X	X
6 To Kwa Wan	✓	X	X
7 Cheung Sha Wan	✓	X	X
8 Ex-Shek O Quarry	X	?	✓
9 Mui Wo	✓	✓	✓
10 Quarry Bay – Site 1	✓	X	?
11 Quarry Bay – Site 2	✓	X	?
12 Chai Wan	✓	X	✓
13 Cyberport	✓	X	✓
14 Tsing Yi South	✓	✓	✓
15 Ma Wan Southwest	✓	✓	X
16 Western District PCWA	X	X	?
17 Ex-Wan Chai PCWA	?	✓	✓
18 Wan Chai Helipad	✓	✓	✓
19 Tsing Yi Southwest	?	✓	✓

Note:

X: Insurmountable problem.

✓: No issue.

?: Uncertain / to be confirmed.

Stage 2 Screening

- Based on 6 Screening Criteria
- Each group identified 2 less preferable sites
- Four high potential sites identified

Shortlisted Sites from Stage 1	Gp 1	Gp 2	Gp 3	Gp 4
Site 2 – Ex-Kai Tak Runway				
Site 9 – Mui Wo	X	X		X
Site 14 – Tsing Yi South		X	X	
Site 17 – Ex-Wan Chai PCWA				
Site 18 – Wan Chai Helipad	X		X	X
Site 19 – Tsing Yi Southwest				

Site A - Ex-Kai Tak Runway

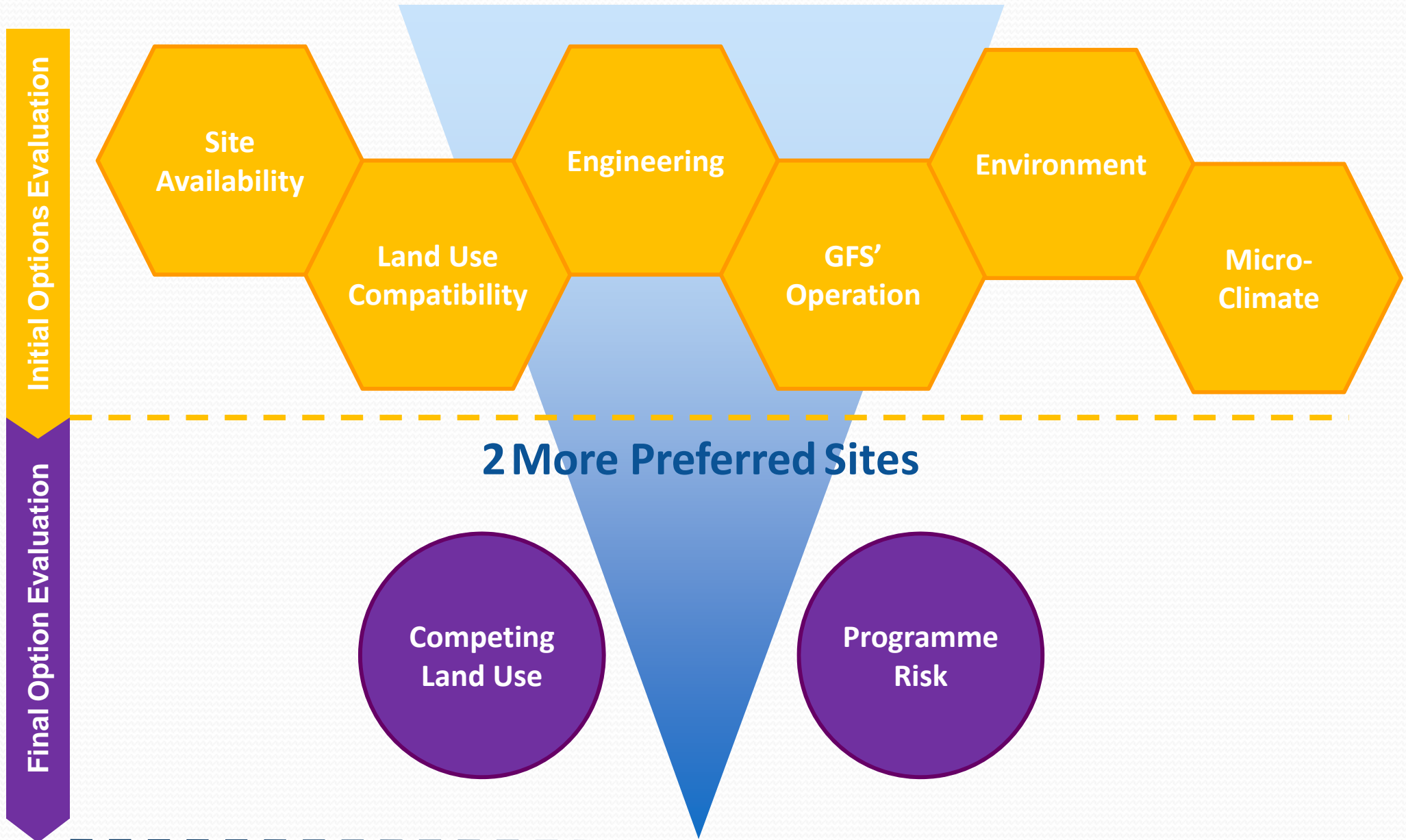
Site B - Ex-Wan Chai PCWA

Site C - Tsing Yi South

Site D - Tsing Yi Southwest

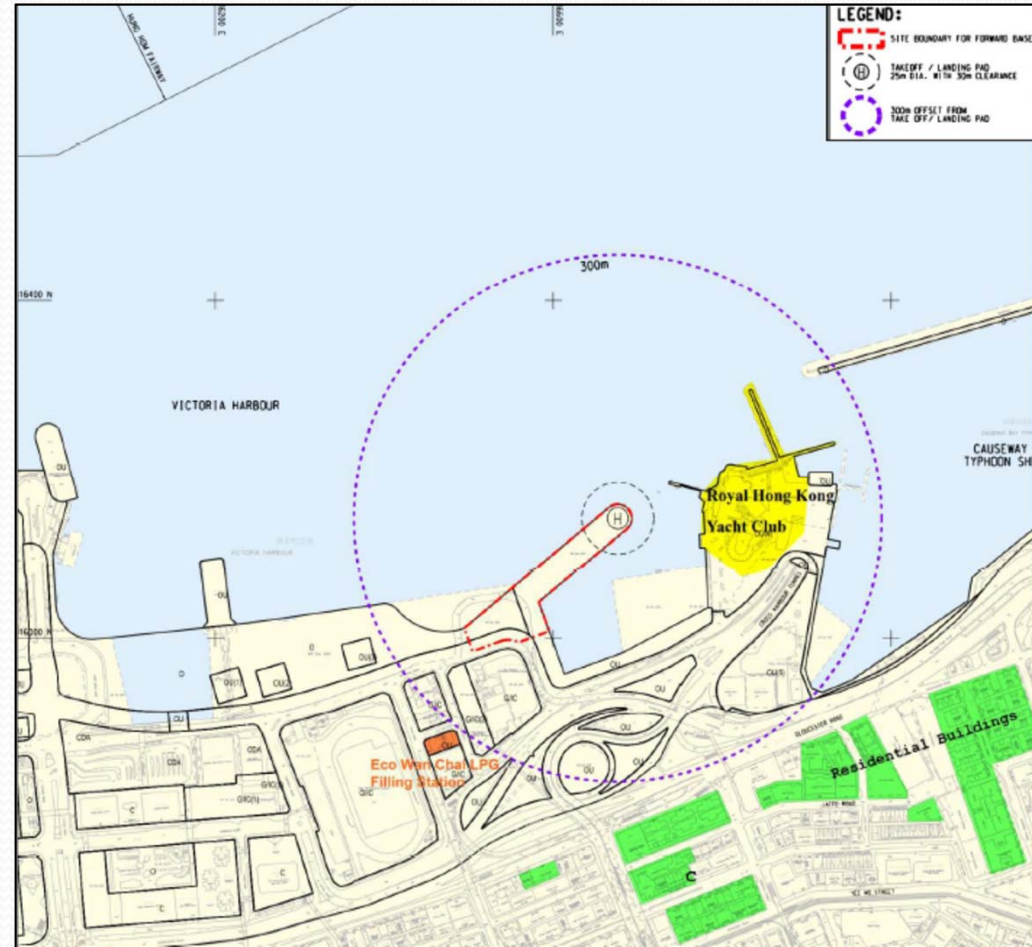
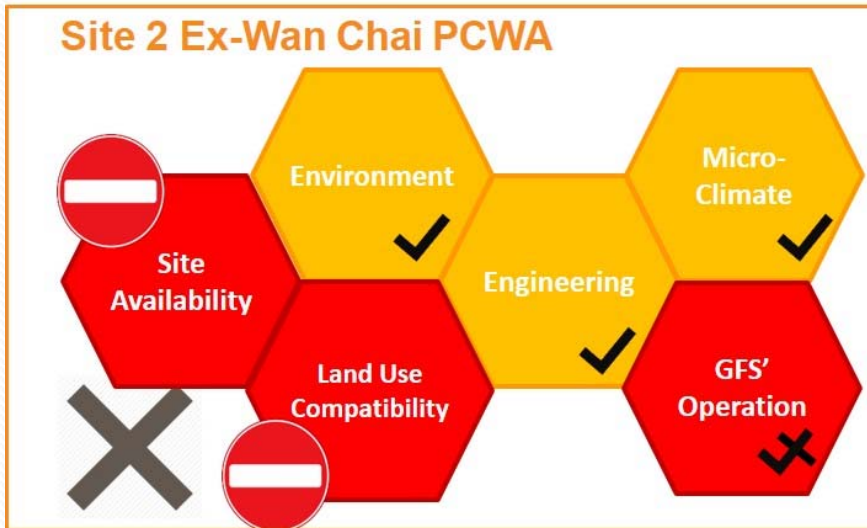


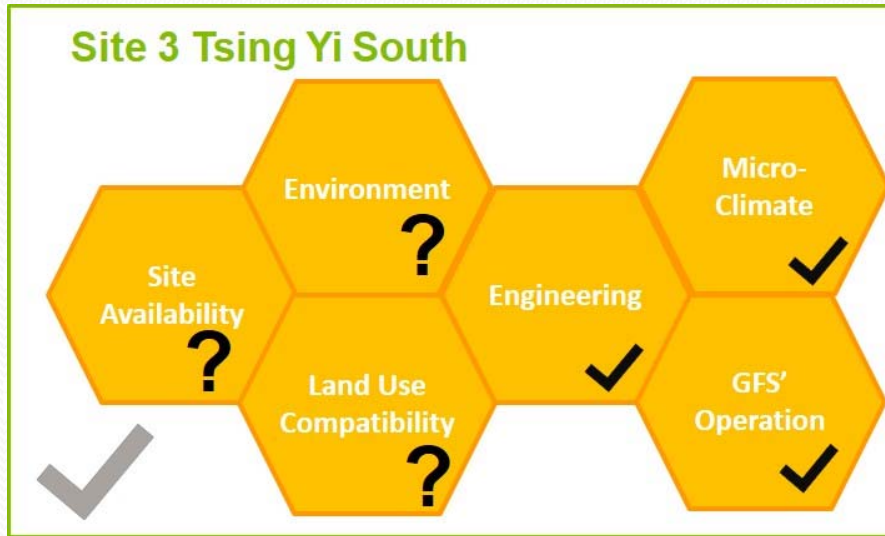
4 High Potential Sites

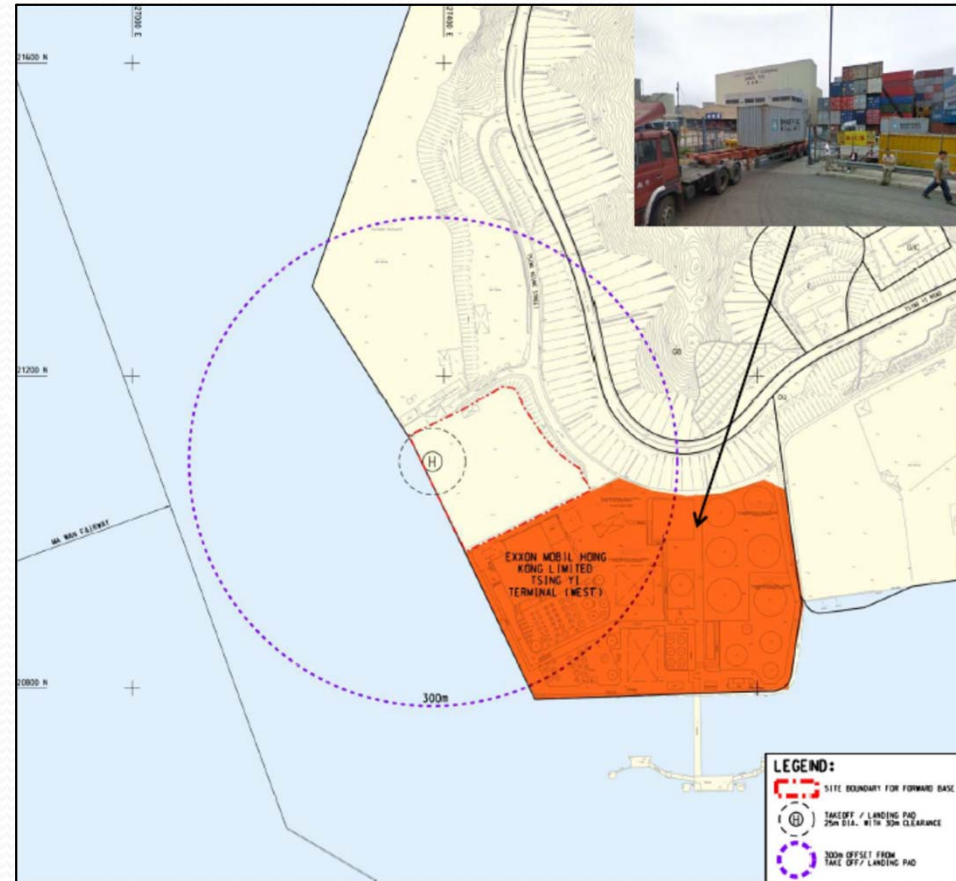
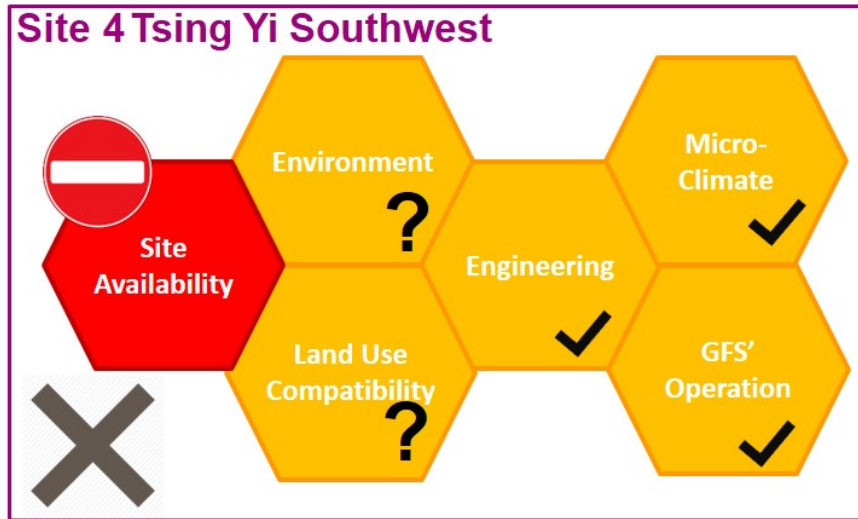


Recommended Site



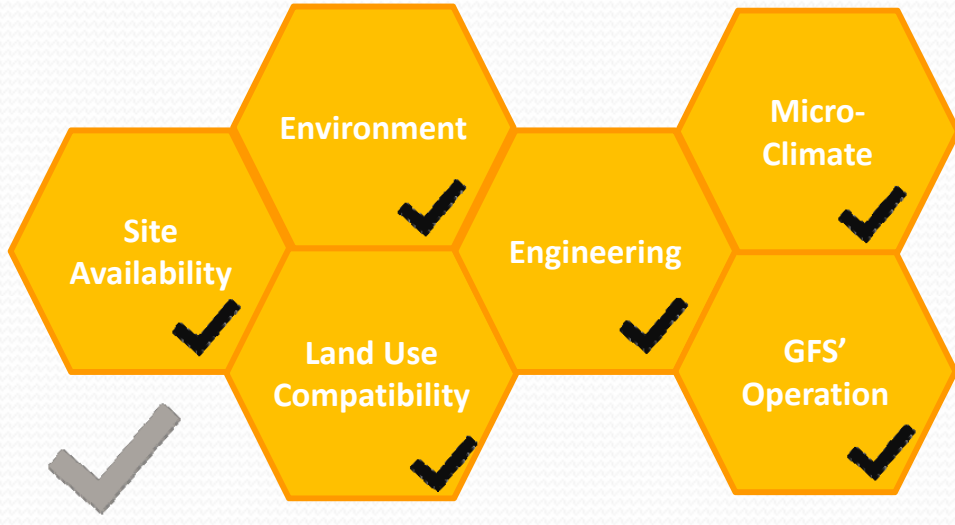




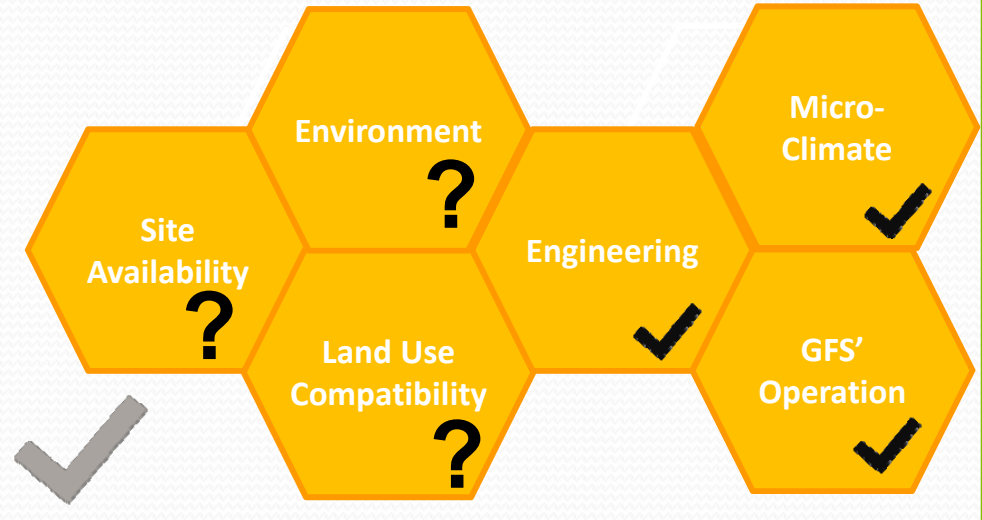


Initial Options Evaluation - Comparison Results

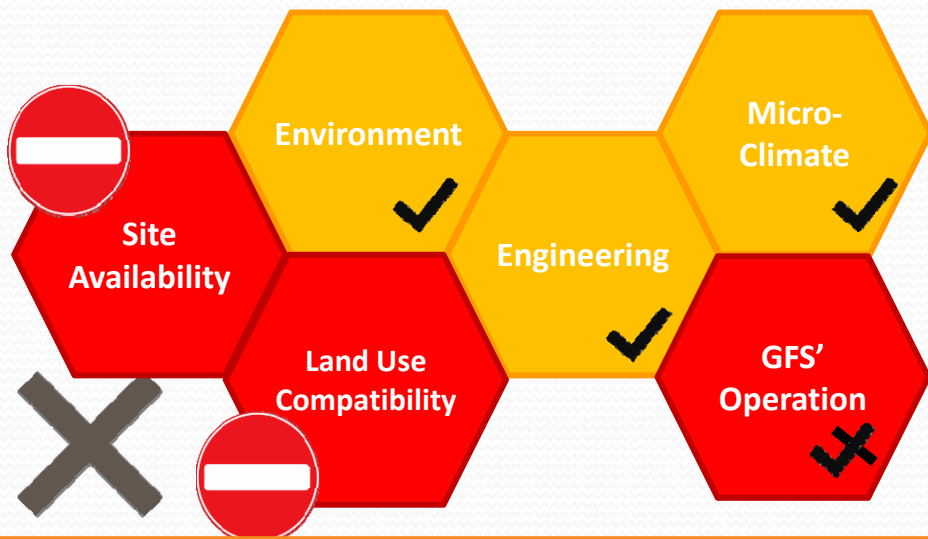
Site 1 Ex-Kai Tak Runway



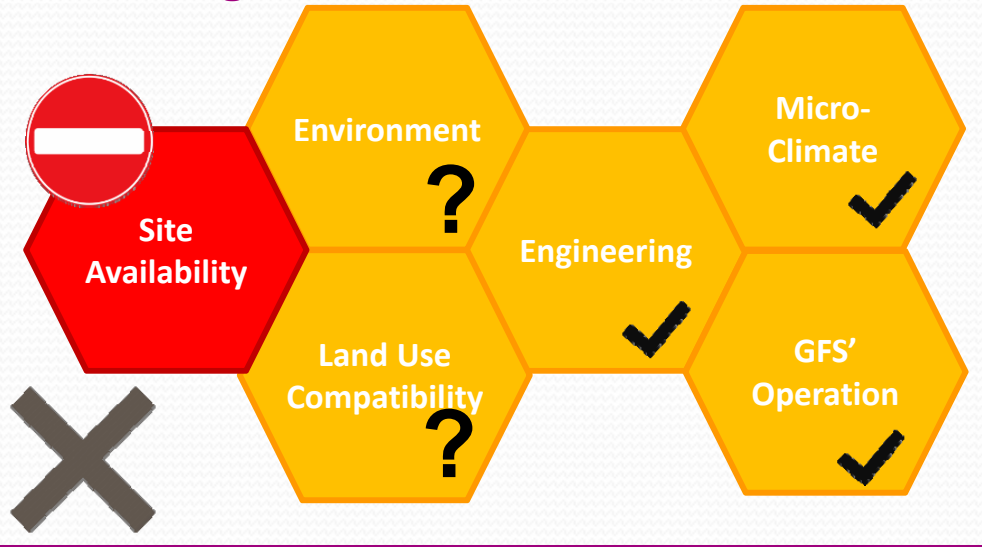
Site 3 Tsing Yi South



Site 2 Ex-Wan Chai PCWA



Site 4 Tsing Yi Southwest



Final Option Evaluation Recommended Site

Evaluation Criteria	Ex-Kai Tak Runway	Tsing Yi South
Competing Land Use	<ul style="list-style-type: none"> • Preserved original planning intention • Maintained synergy between C/B heliport, Cruise Terminal and Future Tourism Node • Optimized use of scarce land resources under co-location arrangement 	<ul style="list-style-type: none"> • Conflict with proposal to reserve the site for container and port-related use • Potential Site for Land Supply – potential residential development under ELSS if CT10 not required
Programme Risk	<ul style="list-style-type: none"> • Site available for KTD development • No re-provision of a C/B heliport site under the proposed co-location arrangement 	<ul style="list-style-type: none"> • Re-provision of the existing mid-stream cum port back-up site • Consultation and legislative amendment process for MRA
Conclusion	<ul style="list-style-type: none"> • Implementation programme can meet planned commissioning of KTD 	<ul style="list-style-type: none"> • Implementation programme CANNOT meet planned commissioning of KTD



2. Helicopter noise impacts

Noise Standards

Aircraft Noise
(Noise Exposure Forecast:
NEF)

Helicopter Noise

L_{\max} dB(A)

Road Traffic Noise

L_{10} (1hr) dB(A)

Note:

[1] The above standards apply to uses which **rely on openable windows for ventilation**.



- Helicopter noise criterion has a different parameter from Aircraft Noise and Road Traffic Noise and **no cumulative impacts** with other noise sources are required under the EIAO-TM +HKPSG.

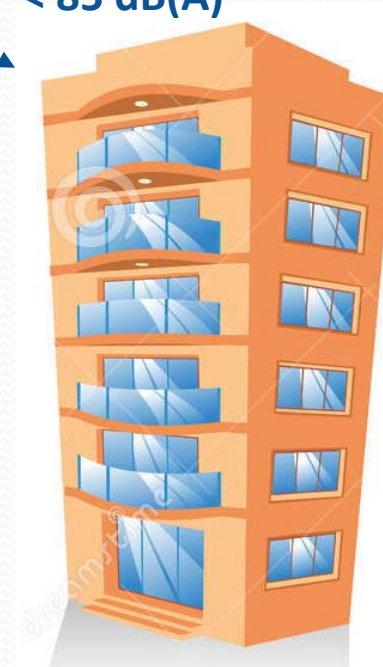


Noise Source - Helicopter

Sufficient Separation to
ensure noise level at Noise
Sensitive Receiver <85 dB(A)

Noise Sensitive Receiver
(rely on openable
windows for ventilation)

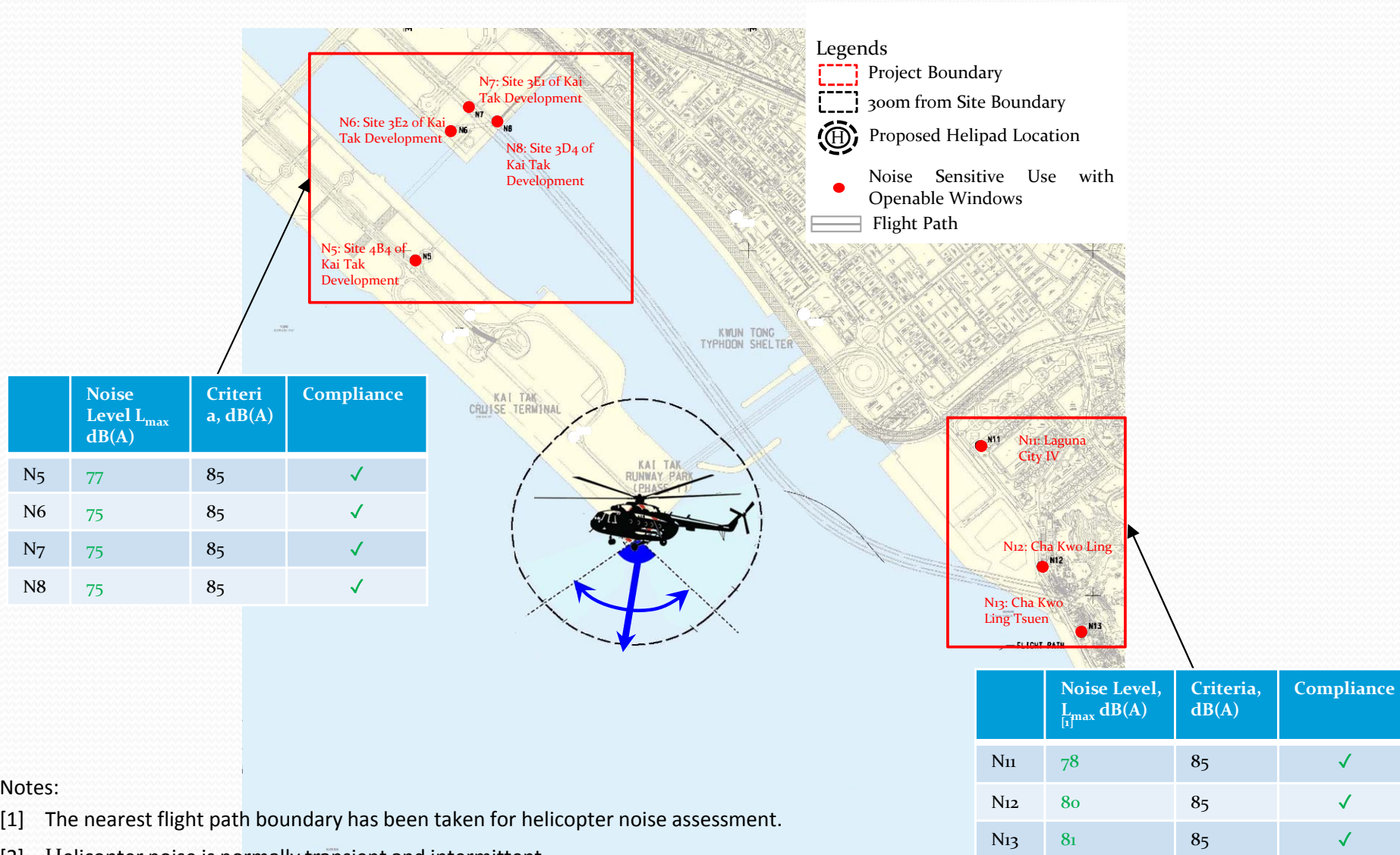
**Helicopter Noise Level
< 85 dB(A)**



Noise Standards for Helicopter (HKPSG)

- **Helicopter Noise $L_{max} = 85$ dB(A)**

- Assessment Results



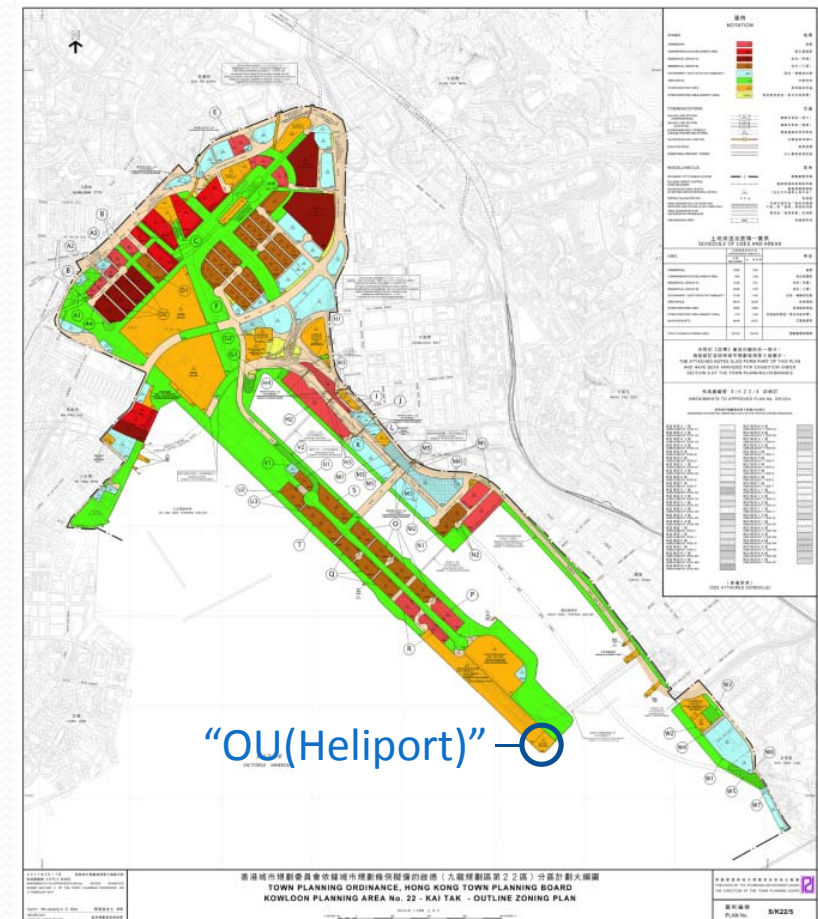
Notes:

- [1] The nearest flight path boundary has been taken for helicopter noise assessment.
- [2] Helicopter noise is normally transient and intermittent.
- [3] Hotel site, normally with no openable windows is not applicable to noise standard criteria under TM-EIAO.



3. Compatibility with the Planned Kai Tak Fantasy initiatives

- 3-stage Public Participation in 2004 - 2006
- Zoned as “Other Specified Uses” annotated “Heliport” under the Kai Tak Outline Zoning Plan (OZP) S/K22/2 since 2007
- Proposed co-location arrangement: preserved original planning intention and maintained the synergy of the heliport with the adjacent KTCT & Future Tourism Node





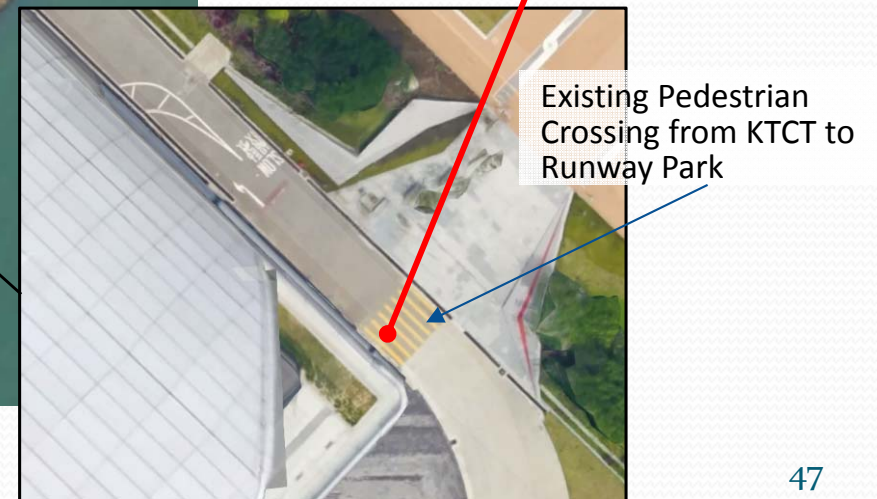
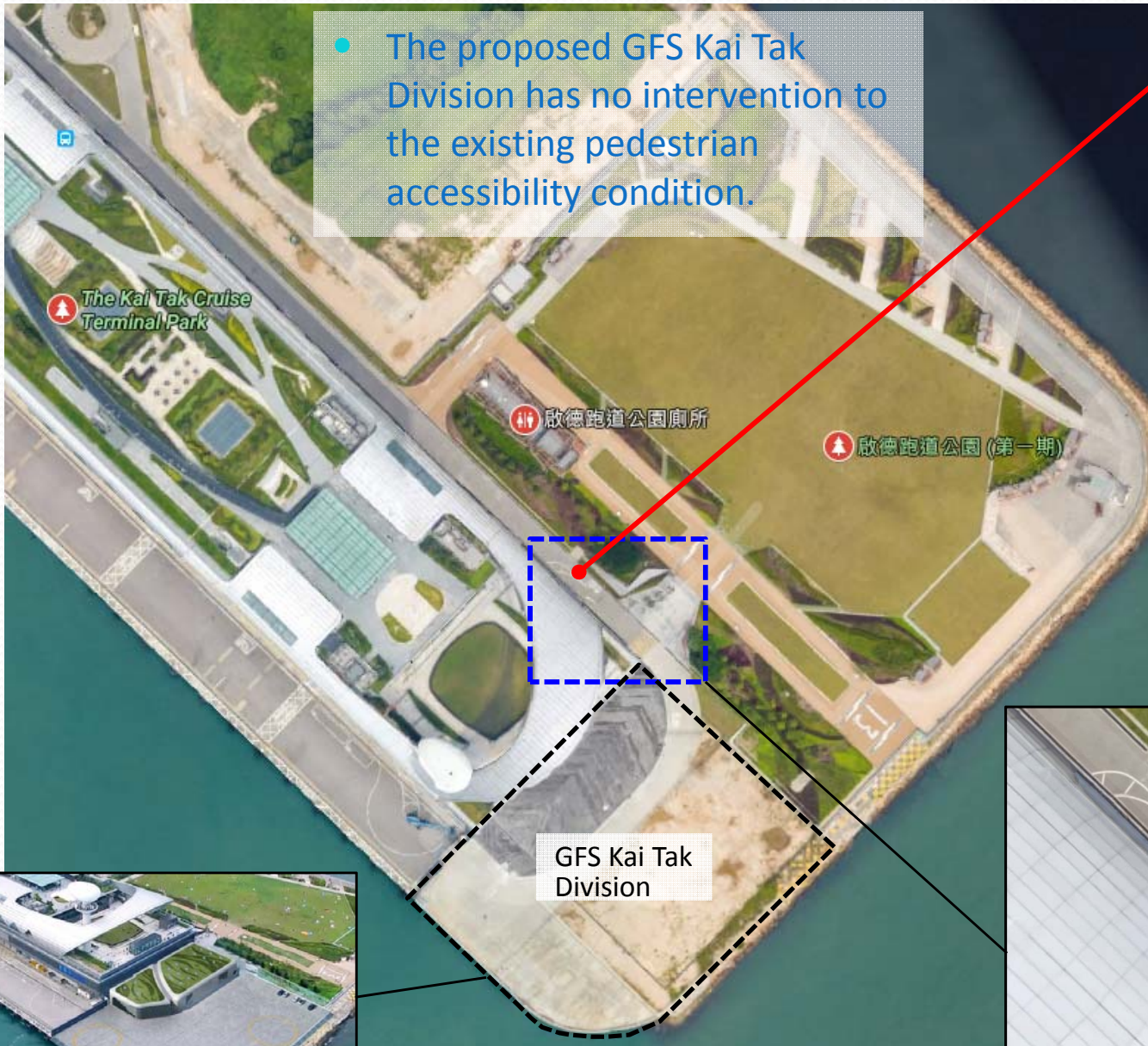
- The Use of the Site for Heliport has already included in the Winning Entry of Kai Tak Fantasy
- Two planning and engineering studies are being carried out to steer the implementation of the Kai Tak Fantasy project



4. Public Enjoyment of Harbourfront Area

Minimal Intervention

- The proposed GFS Kai Tak Division has no intervention to the existing pedestrian accessibility condition.



Minimal Intervention

- Minimized visual intervention to the existing sightline at the tip, in particular the open space of Kai Tak Cruise Terminal and Kai Tak Runway Park.
- Guided tour in Kai Tak Division can be arranged for public participation, provided that the delivery of emergency services is not affected.



Imaginative Future Condition after GFS Division Extension



View from open space of Runway Park

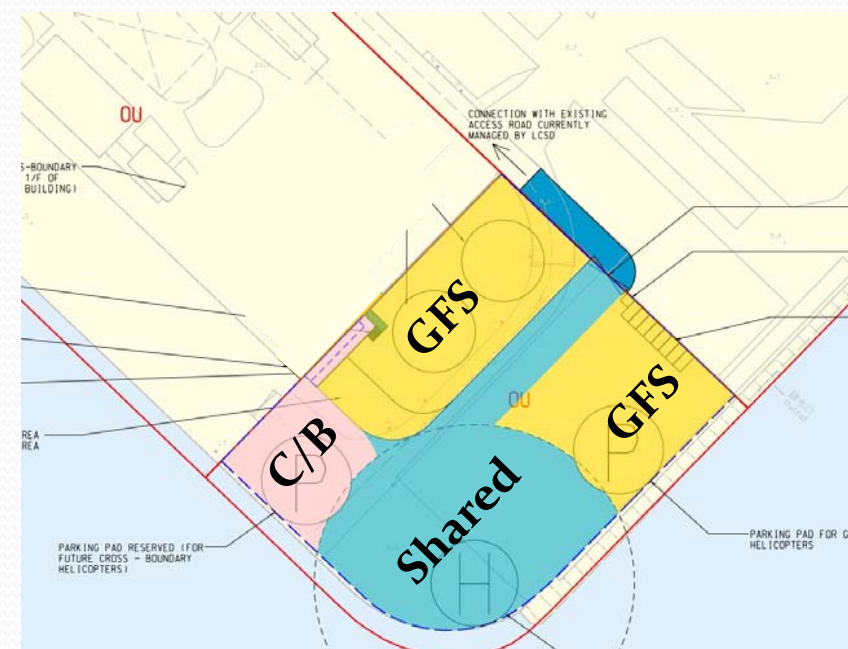


View from open space of Cruise Terminal



5. Phased Development Approach

- A Review to be carried out on demand for cross-boundary commercial helicopter services and use of different heliports, including EKTR site amongst other issues
- **Timely commissioning of KTD is crucial** to supply of over 40,000 new flats in Tung Chung East, starting from **2023** to meet strong demand for housing in short to medium term
 - Construction of KTD planned for commencement by **second half of 2018**
- Current preliminary design of KTD allows development of KTD and future cross-boundary heliport at a later stage by a private operator
- **Construction of KTD first** is considered technically feasible and necessary for meeting housing need and should not hinge on outcome of the Review.





Thank you!