

Hong Kong, 18 September 2014

Panel on Economic Development and Panel on Environmental Affairs Legislative Council Secretariat Legislative Council Complex 1 Legislative Council Road Central, Hong Kong

Dear Chairman and Members,

#### Compensate and mitigate residents who suffer excessive noise events

### Demand Statutory Aircraft Noise Monitoring and Enforcement System before approving the Third Runway Project, Hong Kong International Airport

Legislators should demand a statutory Aircraft Noise Monitoring and Enforcement system, including enforcement action to be taken when aircraft break agreed noise limits. Excessive noise events should result in penalties for the airport, and through them the airlines involved.

Secondly, the proposed mitigation measures under the EIA are insufficient. Taking NEF as the noise evaluation standard does not reflect the actual situation. NEF is the average noise received both daytime and night-time period. On this basis, compensation and mitigation is only offered for a few households in villages along the Lantau coast.

However, recordings by the CAD show that Tung Chung, Ma Wan, Tsing Yi, Tsuen Wan and other areas suffer regular excessive noise events, despite the fact that these areas are beyond the 2011 NEF contours identified in the EIA. This information was absent from the EIA report prepared by the airport. With the 3<sup>rd</sup> runway and as flights increase, Tung Chung, Ma Wan, Tsing Yi, Tsuen Wan, Tuen Mun, Sham Tseng, and Gold Coast will suffer regular excessive noise events.

A Noise Action Plan such as implemented by Heathrow Airport<sup>1</sup> should be considered as a condition for any approval of the airport expansion, and compensation and mitigation measures should be offered to all who suffer excessive aircraft noise events, not just those who are living within the average noise contours identified academically for the EIA.

Finally, the New Airport Master Plan EIA (in 1992) by the Hong Kong Airport Authority (HKAA) proposed to review the Noise Exposure Forecast (NEF) contour every 5 years. However, HKAA has never started any review claiming that the maximum capacity for which it received its environmental permit was never met. The EIA is thus incomplete in protecting residents from excessive noise with mitigation or otherwise compensation measures. A statutory Aircraft Monitoring System and Enforcement system is required so that the Civil Aviation Department (CAD) can review measures based on the actual noise data collected from its noise monitoring stations.

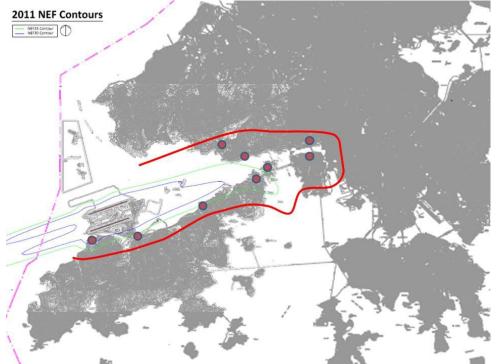
Finally we note that the average noise contours identified in the 3rd Runway EIA report are optimistic and ignore the impact on Ma Wan and other residential areas near the flight paths. For the proposed Aircraft Noise Monitoring and Enforcement system, the CAD and HKAA should adopt update noise monitoring standards like Ldn, DNL, Leq or Lnight rather than the conservative NEF system currently used for the EIA.

### **Designing Hong Kong**

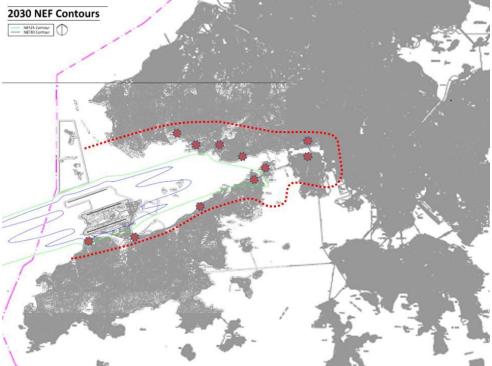
September 2014

<sup>1</sup> http://www.heathrowairport.com/static/Heathrow\_Noise/Downloads/PDF/NAP\_main.pdf Unit 7, 5/F, Eastern Harbour Centre, 28 Hoi Chak Street, Quarry Bay, Tel: +852 3104 3107 Fax:+852 2187 2305





Red dots indicating places that suffer from regular excessive aircraft noise events in 2011 according to CAD data provided to the Legislative Council on 29 May 2013. The green and blue lines indicate the average noise contours according the NEF method under the EIA.



Red dots indicating places which are expected to suffer from regular excessive aircraft noise events in 2030 from modeling the CAD data on excessive noise events, and the change in NEF contours (green and blue lines) with the completion of the 3<sup>rd</sup> runway.

Noise Monitoring Terminal	Noise Level						20	13						2014					
	(dB)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr		
<ol> <li>Mei Lam Estate, Tai Wai</li> </ol>	70 - 74	0	0	1	0	5	3	2	5	0	0	0	0	0	0	0	0		
	75 - 79	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0		
	≥80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<ol> <li>On Yam Estate, Kwai Chung</li> </ol>	70 - 74	0	2	3	6	38	44	47	54	3	1	0	0	0	0	1	0		
	75 - 79	0	0	0	0	2	0	0	2	1	0	0	0	0	0	0	0		
	≥80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	70 - 74	0	0	4	7	0	1	7	1	2	1	0	1	0	0	1	1		
3. Yiu Tung Estate, Shau Kei Wan	75 - 79	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
2	≥80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4. Beverley Heights,	70 - 74	0	0	6	7	0	1	7	6	0	0	1	2	0	0	1	2		
4. Beveney Heights, Cloud View Road, North Point	75 - 79	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0		
	≥80	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		

Annex 1

	Noise Monitoring Terminal	Noise Level						20	13						2014							
		(dB)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr				
5	<ol> <li>Fairmont Gardens, Conduit Road, Mid-Levels</li> </ol>	70 - 74	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0				
5.		75 - 79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		$\geq 80$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
6	<ol> <li>Hong Kong Garden, Tsing Lung Tau</li> </ol>	70 - 74	240	127	201	217	347	506	262	418	154	115	171	182	199	108	188	119				
0.		75 - 79	41	19	26	14	17	30	14	39	11	11	12	22	19	12	33	9				
		$\geq 80$	2	1	1	1	3	3	2	1	0	2	0	0	1	0	2	0				
7.	Sha Lo Wan, Lantau	70 - 74	251	382	378	418	366	283	335	406	416	368			_		_	134				
/.		75 - 79	41	60	82	75	43	41	46	82	66	54			_		_	18				
	(Note 1)	$\geq 80$	7	11	6	6	8	0	7	5	5	5			_		_	0				
		70 - 74	287	159	200	133	48	56	61	67	99	90	170	176	206	126	71	81				
8.	Caribbean Coast, Tung Chung	75 - 79	7	10	9	12	4	4	5	13	15	4	23	3	15	29	4	20				
		$\geq \! 80$	0	1	0	0	1	0	0	3	2	0	1	0	1	0	0	0				

Note 1: No noise data was collected between 25 October 2013 and 7 April 2014 at the noise monitoring terminal in Sha Lo Wan due to equipment outage.

Noise Monitoring	Noise Level						20	13						2014						
Terminal	(dB)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr			
9. Ma Wan Marine	70 - 74	13	5	19	40	195	306	108	274	50	4	10	9	15	1	33	22			
Control Centre,	75 - 79	1	0	2	0	8	5	3	4	1	0	0	2	1	1	0	0			
Ting Kau	≥80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
10. Park Island, Ma Wan	70 - 74	709	421	639	582	555	515	666	543	488	515	468	588	577	401	544	403			
	75 - 79	164	73	106	116	106	94	125	86	80	77	107	132	105	70	164	84			
	≥80	20	13	16	10	8	6	3	7	6	9	10	14	10	10	30	6			
11. Tai Lam Chung	70 - 74	18	14	8	6	6	2	2	2	1	2		12	10	23	35	9			
Tsuen	75 - 79	0	0	1	1	0	0	0	0	0	0		0	3	1	4	0			
(Note 2)	≥80	1	0	0	0	0	0	0	0	0	0		0	0	0	0	0			
12. Greenview Court, Yau Kom Tau, Tsuen Wan	70 - 74	0	0	5	6	34	81	34	14	27	3	0	0	0	0		10			
	75 - 79	0	0	0	0	1	1	0	0	0	0	0	0	0	0		0			
( <i>Note 3</i> )	≥80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—	0			

Note 2: No noise data was collected between 13 November 2013 and 9 December 2013 at the noise monitoring terminal in Tai Lam Chung Tsuen due to equipment outage.

Note 3: No noise data was collected between 5 March 2014 and 26 March 2014 at the noise monitoring terminal in Greenview Court due to equipment outage.

Noise Monitoring Terminal	Noise Level		2013											2014						
	(dB)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr			
13. Cheung Hang Estate, Tsing Yi	70 - 74	0	3	10	17	97	119	111	102	6	3	0	0	0	0	2	0			
	75 - 79	0	0	1	0	2	4	1	5	5	3	0	0	0	0	0	0			
	$\geq \! 80$	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0			
14. Siu Ho Wan MTRC Depot, Sunny Bay	70 - 74	625	348	547	408	283	212	302	269	325	346	351	369	383	285	250	206			
	75 - 79	36	23	31	24	10	6	18	11	25	21	20	26	7	14	16	17			
	≥80	1	1	1	0	0	0	0	1	0	0	0	1	0	1	0	0			
	70 - 74	0	0	0	1	0	1	2	7	2	0	1	0	0	0	2	6			
15. Mount Butler Road, Jardine's Lookout	75 - 79	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0			
	$\geq 80$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
16. Mount Haven, Liu To Road, Tsing Yi	70 - 74	0	1	8	8	15	14	31	30	5					_					
	75 - 79	0	1	0	1	0	1	3	2	0							—			
(Note 4)	≥80	0	0	1	0	0	0	0	1	0										

Note 4: No noise data was collected between 26 September 2013 and 18 December 2013 as well as from 5 January 2014 onwards at the noise monitoring terminal in Mount Haven due to equipment outage.