

立法會
Legislative Council

LC Paper No. CB(2)471/15-16

(These minutes have been
seen by the Administration)

Ref : CB2/PL/HS

Panel on Health Services

**Minutes of special meeting
held on Monday, 24 August 2015, at 4:30 pm
in Conference Room 1 of the Legislative Council Complex**

Members present : Prof Hon Joseph LEE Kok-long, SBS, JP, PhD, RN (Chairman)
Dr Hon LEUNG Ka-lau (Deputy Chairman)
Hon Albert HO Chun-yan
Hon Vincent FANG Kang, SBS, JP
Hon WONG Ting-kwong, SBS, JP
Hon CHAN Kin-por, BBS, JP
Hon CHEUNG Kwok-che
Hon Albert CHAN Wai-yip
Hon YIU Si-wing, BBS
Hon CHAN Han-pan, JP
Hon Alice MAK Mei-kuen, BBS, JP
Dr Hon KWOK Ka-ki
Dr Hon Fernando CHEUNG Chiu-hung
Dr Hon Helena WONG Pik-wan
Hon POON Siu-ping, BBS, MH
Hon Christopher CHUNG Shu-kun, BBS, MH, JP

Members attending : Hon Emily LAU Wai-hing, JP
Hon Frederick FUNG Kin-kee, SBS, JP
Dr Hon Priscilla LEUNG Mei-fun, SBS, JP
Hon Alan LEONG Kah-kit, SC
Hon LEUNG Kwok-hung
Hon WU Chi-wai, MH
Hon IP Kin-yuen
Dr Hon CHIANG Lai-wan, JP

**Members
absent** : Hon Charles Peter MOK, JP
Dr Hon Elizabeth QUAT, JP

**Public Officers
attending** : Dr KO Wing-man, BBS, JP
Secretary for Food and Health

Dr Constance CHAN Hon-yea, JP
Director of Health

Dr Regina CHING Cheuk-tuen, JP
Consultant Community Medicine (Non-Communicable Disease)
Department of Health

Dr Jackie LEUNG Ching-kan
Principal Medical and Health Officer (4)
Department of Health

Dr Derrick AU
Director (Quality and Safety)
Hospital Authority

Dr LIU Shao-haei
Chief Manager (Infection, Emergency and Contingency)
Hospital Authority

Dr Raymond WONG
Consultant, Poison Treatment Centre
Prince of Wales Hospital

**Clerk in
attendance** : Ms Maisie LAM
Chief Council Secretary (2) 5

**Staff in
attendance** : Ms Janet SHUM
Senior Council Secretary (2) 5

Ms Priscilla LAU
Council Secretary (2) 5

Miss Sandra SIU
Legislative Assistant (2) 5

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I. Public health measures for the lead in drinking water incidents
[LC Paper Nos. CB(2)2038/14-15(01) and (02)]

Secretary for Food and Health ("SFH") briefed members on the Administration's public health measures for the lead in drinking water incidents, details of which were set out in the Administration's paper (LC Paper No. CB(2)2038/14-15(01)). SFH added that the Hospital Authority ("HA") had collaborated with local private hospitals to provide additional blood testing service. Thus far, six private hospitals would help perform blood taking for blood lead level screening programme. Among them, the Union Hospital and the Hong Kong Sanatorium & Hospital would start their blood taking service in the afternoon of 29 August 2015 and in the morning of 30 August 2015 respectively, contributing initially a total of 100 quotas for residents of the affected public rental housing ("PRH") estates who belonged to the three more easily affected groups (i.e. children aged below eight, pregnant women and lactating women). By increasing the blood taking capacity at public and private hospitals and blood lead testing capacity at laboratory in parallel, the weekly quota of blood lead level testing would be increased from 360 to 820 by the end of August 2015.

2. Members noted the background brief entitled "Public health measures for the lead in drinking water incidents" prepared by the Legislative Council Secretariat (LC Paper No. CB(2)2038/14-15(02)).

Water sampling tests

3. Holding the view that drinking water should be completely free of lead from the health perspective, Dr LEUNG Ka-lau was concerned about the safety level for lead in drinking water in Hong Kong. The Chairman remarked that different safety level for lead in drinking water was adopted by different authorities. For instance, the action level adopted by the United States Environmental Protection Agency ("EPA") was 15 micrograms of lead per litre of water, whereas the World Health Organization ("WHO") adopted a provisional guideline value of not more than 10 micrograms of lead per litre of water. SFH advised that exposure to lead which was a heavy metal commonly existed in the environment might be inevitable. At present, the Administration had made reference to the provisional guideline value of not more than 10 micrograms per litre of water for lead as set out in the WHO's Guidelines for Drinking-water Quality published in 2011.

4. Dr CHIANG Lai-wan noted that water sampling tests were not carried out for all households of the PRH estates. She expressed concern that to her understanding, some of the 126 residents who were found to have borderline raised blood lead level ranging from 5 to 15 microgram per decilitre, which

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indicated potential health risk, were not from households whose water had been tested. Dr Priscilla LEUNG raised a similar concern. Mr Albert CHAN opined that the drinking water of all households of the affected PRH estates should be tested so as to ease the concern of the affected residents.

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5. SFH advised that the Housing Department ("HD") and the Water Supplies Department ("WSD") would systematically take water samples from the PRH estates. In case the lead level in a water sample was found to exceed WHO's provisional guideline value, further test by a X-ray fluorescence detector would be conducted to detect the existence of lead in the soldering material of the pipe joints of the PRH estates concerned for the purpose of identifying an affected estate. The Department of Health ("DH") would make appointments for households with excess lead found in water sample, as well as other residents of the affected PRH estates who fell into the three more easily affected groups to receive blood lead level testing. The Administration would provide after the meeting information on the number of cases found to have borderline raised blood lead level which were from households of the affected PRH estates whereby the drinking water samples were found to contain lead that exceeded WHO's provisional guideline value. Mr CHAN Han-pan considered that arrangement should be made to subject all households of the affected PRH estates to water sampling tests to allay the concerns of individual households. SFH responded that he would relay members' view to the inter-departmental meeting convened by the Chief Secretary for Administration ("CS").

6. Dr KWOK Ka-ki was concerned about whether drinking water tests would be conducted in public hospitals and the Prince Philip Dental Hospital. Dr Helena WONG and Mr Christopher CHUNG urged the Administration to conduct water sampling tests for all schools in the territory. Mr IP Kin-yuen opined that the issuance of a health advice for reducing lead exposure to schools by the Education Bureau ("EDB") could not address the grave concerns of schools and parents on the safety of drinking water in schools. He asked about the corresponding measures to be taken by the relevant Bureaux in this regard. SFH responded that the Administration was aware of the various concerns of the community. The inter-departmental meeting convened by CS would co-ordinate the follow-up actions for different kinds of facilities.

7. Mr IP Kin-yuen urged the Administration to provide guidelines for water sampling procedure for reference of schools which decided to conduct water sampling tests on their own. Dr Helena WONG raised a similar question, adding that the United States EPA and the American Public Health Association had recommended collecting first-draw water after the water had been standing overnight in the pipes for testing. Mr WU Chi-wai asked

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whether the Administration had collected both first-draw and flush samples for testing and compared the results of the tests. SFH undertook to provide after the meeting information on the standard procedures and practices adopted by the Government for collecting tap water samples for lead testing.

8. Dr Priscilla LEUNG enquired about the timing for the installation of filters for the affected households, in particular those the family members of which were found having a whole blood lead level exceeding the reference value. SFH advised that the progress for installing certified filters for lead reduction for the affected households would depend on the work progress of the main contractors of the PRH estates concerned.

Methods of testing the risk of lead on health

9. Mr Albert HO sought explanation as to the reason why the Administration did not conduct hair and urine tests for residents of the affected PRH estates to measure the level of lead in other parts of their bodies. Consultant, Poison Treatment Centre, Prince of Wales Hospital ("Consultant, PTC, PWH") advised that blood lead level testing was recognized internationally as the most accurate and reliable testing method for screening and diagnosis to assess the risk of lead on health.

10. Dr Helena WONG enquired whether the result of blood lead level test could reveal whether the lead found in the blood, if any, was attributable to exposure to lead in drinking water. Director of Health ("DoH") advised that the most likely sources of lead exposure could be identified through an exposure assessment and an in-depth lead isotope analysis.

Scope of blood lead level testing

11. Dr CHIANG Lai-wan enquired whether children aged below eight who had resided in the affected PRH estates before but had now moved out, as well as children who were not listed on the tenancy agreement but attached to households of the affected PRH estates during daytime (such as being taken care of by family members living in those estates) were eligible for blood lead level testing. Dr Helena WONG expressed dissatisfaction that DH had refused to provide blood lead level testing for a child who was under the day care of a volunteer carer residing at an affected PRH estate under the Neighbourhood Support Child Care Project. SFH advised that from healthcare perspective, consideration could be given to providing blood lead level testing for persons who were not listed on the tenancy agreement but resided in the affected PRH estates. The Administration could follow up the case referred to by Dr Helena WONG if more details were provided after the meeting.

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12. Dr KWOK Ka-ki considered it unsatisfactory that children aged above eight were not covered in the easily affected groups defined by the Administration. Dr CHIANG Lai-wan, Mr CHAN Han-pan and Mr WU Chi-wai held the view that adolescents or children who were under eight years old at the time when moving into the affected PRH estates should be provided with blood lead level testing. Dr Helena WONG considered it unreasonable to impose an age limit of eight years old for children of the affected PRH estates to receive blood lead level testing. In her view, the current arrangement had contravened Article 24 of the Convention on the Right of the Child of the United Nations Educational, Scientific and Cultural Organization which provided that States Parties (including China) should recognize the right of the child to the enjoyment of the highest attainable standard of health. Mr CHAN Han-pan, Mr Frederick FUNG and Dr Fernando CHEUNG asked whether consideration could be given to further extending the scope of the blood lead level testing to cover persons with chronic diseases at a later stage. Miss Alice MAK and Mr CHEUNG Kwok-che raised a similar question, adding that elders should also be included to allay the public concern. Ms Emily LAU sought explanation as to the reason why elders were not covered in the scope of blood lead level testing.

13. SFH explained that a risk-based approach was adopted in determining the scope of blood lead level testing. It was observed that the current incidents had not led to acute lead poisoning (i.e. having a whole blood lead level of more than 44 to 50 microgram per decilitre) which was caused by massive exposure to lead in a short span of time and would affect people of all ages. The Administration was particularly concerned that long-term exposure to lead in drinking water not of a high level would more easily affect the neurodevelopment of fetuses, infants and young children. Having reviewed the relevant literature and research from local medical sectors and overseas health associations, experts of DH and HA had defined the groups which were more easily affected by lead as children under six years of age, pregnant women and lactating women. On the age limit for the affected children for receiving blood lead level testing, the Administration had once expanded the scope of blood testing on 21 July 2015 to children who were under six years old at the time when moving into Kai Ching Estate, Kwai Luen Estate (Phase 2) and Wing Cheong Estate which started intake of residents in around 2013. Subsequently on 3 August 2015, in view of the increasing number of affected PRH estates, the Administration adjusted the scope of blood testing to, among others, children aged below eight so that the use of the finite resources could be focused on young children who were more easily affected by exposure to lead in drinking water. Dr Fernando CHEUNG and Mr Christopher CHUNG held the view that given that the developing organs of children under six years old were more

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susceptible to the toxic effects of lead, all children who were under six years old at the time when moving into the affected PRH estates should be provided with blood testing services.

14. Mr CHEUNG Kwok-che sought information about patients of which chronic diseases would be more vulnerable to the adverse health effects of lead in drinking water and under which circumstances should these patients seek medical consultation in this regard. SFH advised that depending on the amount of lead content in drinking water, patients suffering from chronic kidney diseases would be more easily affected as lead could cause damage to kidneys. Chronic patients who had concern about their health conditions should seek the professional advice from their doctors.

Waiting time for blood lead level testing

15. Noting that the half-life of lead in blood was around 30 days once the source of contamination had been eliminated, Dr KWOK Ka-ki, Mr Albert HO and Mr LEUNG Kwok-hung expressed concern that the unduly long waiting time required for blood lead level testing might render the testing invalid for identifying whether the residents concerned had been subject to adverse health effects arising from lead in drinking water. Dr KWOK Ka-ki surmised that the Administration might stall the blood lead level testing arrangement so as to mitigate the public health consequences of exposure to lead in drinking water.

16. SFH explained that from public health perspective, the top priority was to remove the source of lead exposure after excess lead was found in water. Hence, HD and WSD would immediately arrange bottled water and temporary water supply for the affected PRH estates. Director (Quality and Safety), HA ("D(Q&S), HA") supplemented that HA had endeavoured to limit the waiting time for blood taking to within four weeks to enable tracing of the whole blood lead level at the time prior to the elimination of the source of contamination. With the increase of the weekly quota of blood lead level testing of HA from 360 to 720 by end of August 2015, the waiting time would be shortened to about three weeks. Mr Alan LEONG, Dr Fernando CHEUNG and Mr Christopher CHUNG called on the Administration to further shorten the waiting time for blood taking to allay the concerns of affected residents.

17. Dr KWOK Ka-ki asked whether there were any cases that the time for blood taking had exceeded 30 days after the source of contamination had been eliminated. D(Q&S), HA advised that there had been cases whereby the blood taking appointments were made five weeks after the drinking water samples from the PRH estates concerned were found to contain excess

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lead, as there had been two announcements of the results of water sampling tests in the same week. For these cases, tracing of the whole blood lead level at the time prior to the elimination of the source of contamination was performed. The results revealed that these cases did not require medical assessment and follow-up.

18. Mr POON Siu-ping sought clarification as to the reason why as at 9:00 pm on 19 August 2015, only 3 887 appointments were arranged for blood taking while 5 856 telephone enquiries were received by the hotline set up by DH for the lead in drinking water incidents. DoH explained that the hotline served the purpose of not only arranging blood testing but also providing relevant health advice for enquiries from members of the public and informing the affected households of the blood test results of those in the more easily affected groups. In addition, there might be some cases that the household concerned would call more than once.

Enhancing the blood taking and blood testing capacity

19. Noting that HA had only conducted tests on blood lead level for 1 773 out of the 3 887 appointments as at 20 August 2015, Mr CHAN Han-pan urged the Administration to arrange several public hospitals to provide blood taking service in one go, instead of by rotation, in order to clear the backlog of cases. Miss Alice MAK urged the Administration to engage more private healthcare facilities to provide the blood taking service so that the scope of blood lead level testing could be further expanded. Ms Emily LAU asked whether consideration could be given to providing blood lead level testing vouchers for residents of the affected PRH estates to receive the services at private setting. Dr KWOK Ka-ki opined that subsidies should be provided for residents concerned to receive blood lead level testing in the private sector which could, where necessary, approach overseas accredited laboratories for assistance. Mr Frederick FUNG, Mr LEUNG Kwok-hung and Dr KWOK Ka-ki called on the Administration to directly engage overseas accredited laboratories to perform tests of whole blood lead level in order to facilitate early follow-up of the health conditions for the affected residents. Mr Albert CHAN and Dr KWOK Ka-ki were of the view that the Administration should mobilize healthcare manpower resources beyond HA to enhance its blood taking capacity. Mr Albert CHAN added that, where necessary, HA should purchase more advanced equipment so as to increase its blood testing capacity. Mr WU Chi-wai sought clarification as to whether the bottleneck rested with the time required for blood taking or the blood testing capacity of the laboratories concerned.

20. SFH explained that the issues at stake included the blood taking as well as blood testing capacity. At present, additional healthcare personnel,

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in particular those of the paediatrics departments and laboratories of HA, had to work outside regular hours to provide additional blood taking and blood testing services. It should also be noted that each private hospital, which helped to perform blood taking for whole blood level screening for residents of the affected PRH estates who belonged to the three more easily affected groups, could only contribute initially 50 quotas per week. This helped increase the overall blood taking capacity to the level of around 800 to 900 quotas per week. The Administration would keep in view as to whether the scope of blood lead level testing could be further expanded when more private hospitals would help out at a later stage and subject to the development of the lead in drinking water incidents. As regards blood testing capacity of the private sector, SFH pointed out that local private laboratories had to send the blood samples to the accredited laboratories of HA or overseas accredited laboratories for testing. Hence, the more direct measures that had been put in place by HA to increase the blood testing capacity were to send certain batches of blood samples to overseas accredited laboratories for testing and purchase new blood testing equipment.

[At this juncture, the Chairman informed members of his decision to extend the meeting for 15 minutes beyond its appointed time to allow more time for discussion.]

21. Mr Alan LEONG opined that while it was understandable that blood taking for young children might require considerable time and efforts, HA should consider inviting healthcare professionals or trained non-healthcare personnel to provide voluntary outreach blood taking services for other residents of the affected PRH estates in order to expedite the blood taking process. D(Q&S) HA advised that HA had given thought to the provision of outreach blood taking services for the affected residents. It was, however, considered that the whole process which included the drawing of blood, labelling of the collection tubes and delivery of the samples for testing, might be more efficient and reliable if took place at the hospital setting. Under the current arrangement, an average of four to six blood samples would be taken per hour. Mr Christopher CHUNG opined that the average number of blood samples taken by HA per hour was at the low end.

22. Dr LEUNG Ka-lau remarked that the cost for the Administration to engage local private laboratories to expedite the blood testing process should not be high. To his understanding, the charges of local private laboratories for performing blood lead level testing were considerably low. Mr LEUNG Kwok-hung expressed concern about the accuracy of the blood lead level tests performed by those local private laboratories which claimed that they could provide such services at considerably low charges. SFH said that it was not appropriate for him to comment on the services and the

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market price for blood lead level testing referred to by Dr LEUNG Ka-lau. The Chairman requested the Administration to provide after the meeting information on the average unit cost for the blood lead level tests performed by HA's accredited laboratories, and local and overseas private laboratories respectively.

23. Mr WU Chi-wai asked when the new blood testing equipment purchased by HA would be put into use and how far such equipment could enhance the blood testing capacity. Dr Helena WONG asked whether such equipment would be used for conducting preliminary screening. D(Q&S), HA advised that five new blood test equipment had just been put into use for screening out those blood samples with low or normal whole blood lead level. This would enhance the weekly blood testing capacity of HA from the previous range of 300 to 400 samples to 500 to 600 samples. Given that the weekly blood taking capacity would be increased to about 800 to 900 samples by end of August 2015, around 300 blood samples would be sent to overseas accredited laboratories for testing per week. Dr Helena WONG considered that more new blood testing equipment should be purchased to further increase the capacity of blood testing.

Care plan for persons with different whole blood lead levels

24. Miss Alice MAK sought elaboration about how the Administration would follow up those cases from the affected PRH estates whose whole blood lead level exceeded the reference values (i.e. those children and adults who were respectively found to have whole blood lead level of 5 and 10 microgram per decilitre or above). She was particularly concerned about the waiting time for subsequent follow-up health evaluation after the first consultation to ensure that the health conditions of the affected residents would be kept track as appropriate. Mr Frederick FUNG and Mr Christopher CHUNG called on the Administration to closely monitor the long-term development of those children whose whole blood lead levels exceeded the reference value.

25. DoH advised that according to the established care plan, DH would perform lead overall exposure assessment for all of the cases whose whole blood lead level exceeded the reference values, and arrange preliminary development assessment if they were children under 12 years old. For the latter, depending on the outcome of the assessment, certain cases would receive further assessment and follow-up by the Child Assessment Centres ("CAS"). For the other cases, they would be followed up under the normal assessment programmes provided by the Maternal and Child Health Centres ("MCHC") or under the Student Health Service ("SHS") as appropriate. D(Q&S), HA advised that HA would arrange health evaluation for cases

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with whole blood lead levels exceeding the reference values but below the significantly raised to toxic level, and re-assess their whole blood lead level in three months' time. HA's specialist outpatient clinics ("SOPCs") would provide clinical assessment and follow-up to those cases with significantly raised to toxic whole blood lead level.

26. Dr Fernando CHEUNG asked whether parents or schools could seek assistance of MCHC or under SHS to arrange preliminary development assessment for children who were considered to have developmental delay. SFH advised that under the existing mechanisms of MCHC and SHS, children who were under 12 years of age and were suspected to have developmental-behavioural problems would be referred to CAS for assessment.

27. Ms Emily LAU was concerned about the health risk of excess lead exposure on pregnant women and lactating women. Miss Alice MAK asked whether those lactating women having a whole blood lead level exceeding the reference value were provided with advice as to whether they should stop breastfeeding. Consultant, PTC, PWH advised that pregnant women with lead exposure might have increased blood pressure and a greater risk of miscarriage, early birth and infant neurodevelopment. Under the care plan, gynaecologists of HA would arrange health evaluation and follow up for those affected pregnant woman whose whole blood lead level exceeded the reference value. Given that the breast milk lead level would be no more than 3% of the whole blood lead level of the lactating women, it was recommended that lactating women whose whole blood lead level exceeded the reference value should continue breastfeeding if their children were found having normal blood lead level.

28. Mr POON Siu-ping was concerned about the manpower capacity of HA and DH for coping with the extra workload arising from the provision of follow-up care for those affected residents whose whole blood lead level exceeded the reference values. DoH advised that apart from deploying the existing staff, DH had engaged contract and retired staff to cope with the additional workload. D(Q&S), HA advised that in the meantime, the pressure exerted on HA was not high as all those cases found with whole blood lead levels exceeding the reference values did not require follow-up by SOPCs of HA.

[At this juncture, the Chairman proposed and members agreed that the meeting be further extended for 15 minutes.]

29. Noting that the water samples taken from a primary school which conducted water sampling tests on their own were found with excessive lead,

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Dr KWOK Ka-ki and Mr IP Kin-yuen asked about the Administration's follow up actions and advice to allay the health concerns arising from lead in drinking water in schools. Mr CHAN Han-pan asked whether arrangement would be made for students of the affected schools to receive blood lead level testing. Dr Helena WONG asked whether the scope of blood lead level testing for the affected schools, if so provided, would be limited to students under eight years old. SFH advised that DH had provided health advice to schools and kindergartens for reducing lead exposure through EDB. The issue would also be discussed in the inter-departmental meeting convened by CS to be held on 29 August 2015.

30. Mr Frederick FUNG asked whether the Administration would provide some form of compensation, such as providing subsidies for follow-up medical consultation or waiving rent and water charges, for those residents of the affected PRH estates whose whole blood lead level exceeding the reference values. Dr Priscilla LEUNG considered that the Administration should also take care of the psychological and welfare needs of the affected households. Mr Christopher CHUNG asked whether compensation would be provided to the affected residents. SFH agreed to relay members' concern to the inter-departmental meeting convened by CS for consideration.

Measures to ensure the safety of drinking water

31. Dr Helena WONG asked about the measures to be put in place by the Administration to ensure the safety of drinking water. SFH advised that the Task Force led by WSD, the Review Committee on Quality Assurance Issues Relating to Fresh Water Supply of Public Housing Estates established by the Housing Authority and the Commission of Inquiry into Excess Lead Found in Drinking Water would investigate and review the various issues relating to the lead in drinking water incidents. These included, among others, the causes of lead in drinking water in PRH developments and measures to ensure the safety of drinking water in Hong Kong.

32. Dr Priscilla LEUNG urged the Administration to make public the investigation report of the Task Force led by WSD, which was expected to be available in mid October 2015, to facilitate members of the public to better understand the causes of excessive lead content found in drinking water at PRH estates, whether testing of heavy metals should be made mandatory and whether the relevant legislation should be reviewed to ensure the safety of drinking water. SFH advised that an information leaflet on Hong Kong's water supply including how to reduce lead in drinking water was under preparation.

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II. Any other business

33. The Chairman reminded members the House Committee would hold a special meeting on 1 September 2015 at 2:00 pm to discuss the lead in drinking water incidents.

34. There being no other business, the meeting ended at 6:57 pm.

Council Business Division 2
Legislative Council Secretariat
15 December 2015