Summary of Participants' Views

Technical Meeting on Testing and Regulating Electronic Cigarettes and Novel Tobacco Products in Hong Kong

Roundtable Discussion 1:
Toward a universal standard on testing e-cigarettes and novel tobacco products: standardised procedures and essential substances to be looked for

1. It was agreed in the meeting that standardised procedures for testing e-cigarettes (including e-liquids) and heat-not-burn tobacco products should be developed to gain a better understanding of the products (i.e. to build intelligence) and to allow for comparisons of laboratory findings.

2. On the testing regime for e-cigarettes, the participants shared the view that the findings on the composition of emissions can be quite variable depending on the parameters used in the regime and product design. The power of the device and the content of the refill solution (e-liquid) and other factors also play a role. While developing and adopting a standardised testing regime for both the contents of e-liquids and the resulting aerosol is ideal, some participants suggested that regulatory authorities may focus on testing the contents of e-liquids, rather than the aerosol especially if there are resource constraints.

3. Meanwhile, it is feasible to await the finalisation of the relevant ISO Standard under development. Further developments in relation to the work currently being undertaken by World Health Organization (WHO) TobLabNet on e-cigarettes will also prove to be very useful in developing a testing regime for e-cigarettes. However, the testing of emissions from the whole device should also be considered when additional resources are available, as there is evidence that certain harmful substances in the aerosols of e-cigarettes may originate from other materials in the device, rather than just the e-liquid. It must be noted that different parts

of e-cigarettes are interchangeable (i.e. can be used with other devices), which complicates testing and this should be taken into consideration in proposals to develop a standard for emissions.

4. On the testing regime for emissions from tobacco sticks operated with devices for heat-not-burn tobacco products (e.g. IQOS), the group concurred that these could be tested based on an existing protocol following some modifications (e.g. ISO or Intensive Health Canada protocol with the same puff volume, airflow, and puff duration as testing conventional cigarettes). In the case of testing emissions from tobacco sticks used for instance in the IQOS device, since the battery lasts for only 6 minutes, the puffing interval may be shortened to allow for 14 puffs in total as specified in the IQOS instruction manual.

5. It was also agreed in the meeting that a list of essential substances to be analysed in testing emissions from e-cigarettes and contents of e-liquids should be specified. These substances include nicotine, as a minimum (to test whether it is present in electronic non-nicotine delivery systems, and their level against the product label in electronic nicotine delivery systems), and essential harmful and potentially harmful chemicals, including but not limited to formaldehyde, acetaldehyde, benzaldehyde, cinnamaldehydes, diacetyl, and acetyl propionyl in the aerosol. It was also noted that existing work by credible regulators, public health bodies, and advisory groups, such as the United States Foods and Drugs Administration and the WHO Study Group on Tobacco Product Regulation, be taken into consideration in drafting such a list. It is also worthwhile using mass spectrometry to test e-liquids for contaminants, including heavy metals, toluene, benzene, and diacetyl arising from low grade solvents used in the formulation of glycerol and propylene glycol.

6. Some participants suggested that both e-cigarettes and heat-not-burn tobacco products should be tested and monitored at regular intervals (e.g. every 2, 6 or 12 months) as specified for cigarettes and other tobacco products, if there are available resources. The government/regulatory authority could also

consider mandating manufacturers to report on these products, based on standardised templates, to regulatory authorities for monitoring purposes.

7. Meaningful ways to communicate the information on the safety of e-cigarettes to the public should be explored to discourage use among non-smokers and youths. Regarding heat-not-burn tobacco products, information on their potential risk as well as the content of these products should be effectively communicated to the public to prevent misinformation by manufacturers. To achieve this, regulators can mandate manufacturers to provide such information to the responsible national authority. It was proposed that regulators should avoid giving the impression of endorsing these products by using terms carrying a positive tone, which may imply that these products are risk free, or suggest that they are superior in some aspects to conventional cigarettes. For example, terms such as ‘innovative’ should be avoided.

8. Also, since the use of e-cigarettes and heat-not-burn tobacco products may release environmental pollutants (e.g. particulate matter, nicotine, other toxins released to the air and used batteries and filters from discarded products), the public should be informed that these products contain pollutants, which could potentially pose health risks. Therefore, manufacturers of these products should not be allowed to promote these products as ‘clean’ products, unless they are able to prove that exposure to the emissions generated from these products carry no risk to bystanders involuntary exposed to secondhand emission. These products, since they may contain tobacco, should be covered under the provisions of the WHO Framework Convention on Tobacco Control (WHO FCTC) and their use should be prohibited in no smoking areas for protection of public health.

9. In conclusion, for regulatory purposes, testing procedures for e-cigarettes and heat-not-burn tobacco products should be standardised. A list of essential substances to be analysed in every test as recommended by the WHO in their Technical Report Series 989 and 1001, whenever resources are available, should be

included in the long run.

Participants (in alphabetical order)
Dr Aurélie BERTHET, The University of Bern, Switzerland
Dr Constance CHAN, Department of Health, HKSAR
Dr Tina CHAN, Department of Health, HKSAR
Dr Nuan Ping CHEAH, Health Sciences Authority, Singapore
Dr CHUNG Shan Shan, Hong Kong Baptist University, HKSAR
Dr Ranti FAYOKUN, World Health Organization
Dr Maciej GONIEWICZ, Roswell Park Cancer Institute, USA
Mr Walther KLERX, National Institute for Public Health and the Environment, Netherlands
Dr Bartosz KOSZOWSKI, Battelle Memorial Institute, USA
Dr Cindy LAI, Department of Health, HKSAR
Mr LEE Foo Wing, Government Laboratory, HKSAR
Dr ZHENG Jin Shu, Hong Kong Baptist University, HKSAR

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Roundtable 2:
Challenges in regulating electronic cigarettes and novel tobacco products: should we put these products under existing regulatory framework or start a new regime

1. Participants attending this roundtable discussion came from a variety of countries with very different regulatory situations – ranging from places where these products are freely available and advertised, to places where they are completely banned.

2. The issue of safety of e-cigarettes was discussed, with the participants agreeing that the safety of these products should be carefully evaluated. Routine testing for known toxic substances (e.g. formaldehyde, acetaldehyde, benzaldehyde, cinnamaldehydes, diacetyl, and acetyl propionyl) suggested by the World Health Organization (WHO), as well as toxic chemicals that have been identified in cigarettes, should be carried out. Moreover, some participants suggested that the government/regulatory authority could also consider mandating manufacturers to report on these products, based on standardised templates, to regulatory authorities for monitoring purposes. .

3. The need to monitor the use of e-cigarettes and heat-not-burn tobacco products in the general population was considered. There was consensus that their uses should be included in all monitoring surveys. The measures may include prevalence (especially dual use), non-users' exposure to secondhand emissions, harm, attitudes, policy, price, safety of e-cigarettes, and the effect of e-cigarettes on cessation. In particular, monitoring should be carried out to identify e-cigarette and heat-not-burn product initiation among youth, as well as the possible transitions from e-cigarettes/heat-not-burn tobacco products to cigarettes and vice

versa.

4. There was agreement that evidence on e-cigarettes as a quitting aid is still limited and that further evidence on this issue is urgently required. In the interim, it may be worthwhile to extend the existing cessation services to include resources to assist users with quitting e-cigarettes and heat-not-burn tobacco products.

5. Participants discussed how e-cigarettes and heat-not-burn tobacco products should be taxed. Some participants suggested that only if conventional cigarettes would be further taxed to a higher than current level, may e-cigarettes be taxed less heavily than conventional cigarettes. Others proposed that heat-not-burn tobacco products, be taxed at the same level as conventional cigarettes. Nevertheless, the group agreed that the tax for both products should be high enough to discourage use by youth. Finally, it was proposed that further thought be given to clarifying how e-cigarettes and heat-not-burn products should be taxed in comparison to conventional cigarettes.

6. The possibility of applying a full ban, or alternatively, regulating the manufacturing, marketing, and sale of e-cigarettes and heat-not-burn tobacco products was also considered by the group. Views were divided but the group agreed that more work will be required to find a way forward, which is appropriate for Hong Kong's present situation.

7. Various regulatory options were discussed with regards to these products. These included prohibiting the use of e-cigarettes and heat-not-burn tobacco products in no smoking areas; text and/or pictorial warning labels on packets and/or the device (while the pictorial warning labels on e-cigarettes would probably be different from those on conventional cigarettes, they should not give the impression that these products are safer); prohibiting sale to minors, as well as the use of flavours that are attractive to youth; and prohibiting advertisement and promotion (including all unproven health and cessation claims). WHO recommends

that heat-not-burn tobacco products be subject to policy and regulatory measures applied to all other tobacco products, in line with the WHO Framework Convention on Tobacco Control (WHO FCTC).

8. Some of the participants suggested consideration of increasing the minimum age of sale of all tobacco products, including e-cigarettes and heat-not-burn tobacco products, to 21 years. The rationale is that smoking adversely affects adolescent brain development.

9. The group discussed the inconsistency associated with the terms used to describe “heat not burn tobacco products” and that consideration should be given to changing the term ‘heat-not-burn’ to a term that better reflects the fact that these products contain tobacco. ‘Heat-not-burn’ is a term coined by the tobacco industry and has positive connotations. Therefore, the group requested WHO to propose a term that better reflects the products both in terms of their composition and operation. The WHO recommended that these products be described as heated tobacco products (HTPs) and communicated this to all stakeholders following the meeting.

10. In conclusion, e-cigarettes and heat-not-burn tobacco products should be routinely tested for known toxic substances (including but not limited to formaldehyde, acetaldehyde, benzaldehyde, cinnamaldehydes, diacetyl, and acetyl propionyl). Their use in the general population should be monitored. In places where these products are already available, these products should be regulated by appropriate policies, including the institution of appropriate surveillance mechanisms, accurate description of the products and application of the full complement of the provisions of the FCTC, at the minimum for heat-not-burn tobacco products. However, further work is needed to reach an agreement on whether to ban them or otherwise. On taxation, it has been suggested that they should be taxed at a high enough level to discourage initiation by children, young people and non-smokers. Inconsistency associated with the terms used for heat-not-burn

tobacco products was discussed, and the WHO recommended using the term “heated tobacco products” (HTPs).

Participants (in alphabetical order)
Ms Dana BEATON, Health Canada, Canada
Dr Douglas BETTCHER, World Health Organization
Dr Constance CHAN, Department of Health, HKSAR
Dr Tina CHAN, Department of Health, HKSAR
Dr Quan GAN, the Union China Office, China
Prof Geoffrey FONG, University of Waterloo, Canada
Dr Brian KING, Centers for Disease Control and Prevention, USA
Mr Antonio KWONG, Hong Kong Council on Smoking and Health, HKSAR
Dr Cindy LAI, Department of Health, HKSAR
Prof LAM Tai Hing, The University of Hong Kong, HKSAR
Prof Judith MACKAY, Asian Consultancy on Tobacco Control
Dr Garth REID, NHS Health Scotland
Dr Takahiro TABUCHI, Osaka Medical Center for Cancer and Cardiovascular Diseases, Japan
Dr Kelvin WANG, The University of Hong Kong, HKSAR