

For discussion on  
11 November 2010

**Legislative Council Panel on Security**

**Proposed amendments to the schedules to the  
Dangerous Drugs Ordinance (Cap. 134) and the  
Control of Chemicals Ordinance (Cap. 145)**

**PURPOSE**

This paper sets out the Administration's proposals to amend –

- (a) Part I of the First Schedule to the *Dangerous Drugs Ordinance* (Cap. 134) ("DDO") with a view to including the following synthetic substances which are liable to abuse –
  - i/ derivatives of piperazine (as specified in Annex A);
  - ii/ synthetic cannabinoids (as specified in Annex B);
  - iii/ derivatives of cathinone (as specified in Annex C); and
- (b) Schedule 2 to the *Control of Chemicals Ordinance* (Cap. 145) ("CCO") with a view to including the chemical, 1-[(2-Chlorophenyl)-N-(methylimino)methyl]cyclopentanol, and its salts which are liable to be used in the production of a dangerous drug.

**BACKGROUND**

*Derivatives of Piperazine*

2. Derivatives of piperazine are synthetic chemicals which have gained prevalence overseas as substances of abuse and as an alternative to other psychotropic drugs. According to the International Narcotics Control Board, the abuse of derivatives of piperazine was first reported in

the United States in 1996. Since then the abuse of these substances has spread rapidly to Europe.

3. According to the Department of Health (DH), derivatives of piperazine exhibit psychoactive properties and are liable to abuse. Abuse of these substances could lead to vomiting, headache, palpitations, anxiety, insomnia, confusion, irritability, tremors and grand mal seizures. These substances are not pharmaceutical products and have no known medicinal or clinical uses though a few of them have been used in experimental neuropharmacology or as precursors in the synthesis of anti-depressant drugs.

4. Hong Kong recorded the first seizure of derivatives of piperazine used as psychotropic substances in May 2009. Up to 30 September 2010, the Government Laboratory (GL) has identified 5 892 tablets of such substances submitted for examination in 43 cases, indicating that the abuse of these substances is becoming popular in Hong Kong.

### *Synthetic Cannabinoids*

5. Smokable herbal mixtures containing synthetic cannabinoids have emerged as a new psychotropic drug of abuse amongst teenagers and young people in recent years overseas, particularly in Europe. Different types of synthetic cannabinoids are present in such herbal mixtures. When smoked, it produces psychoactive effects similar to those produced by cannabis. In response to potential health concerns, various European countries, as well as the Republic of Korea, have imposed legislative control on synthetic cannabinoids.

6. According to DH, only one of the synthetic cannabinoids, nabilone, has been used medicinally overseas mainly to reduce the signs of nausea and vomiting of patients due to cancer chemotherapy but it is not used by medical practitioners in Hong Kong. The effects of synthetic cannabinoids in general broadly commensurate with those of cannabis. Abuse of these substances will lead to hallucinations, increased agitation, elevated blood pressure and heart rates, and seizures. Products containing synthetic cannabinoids are potentially more harmful than cannabis as the potency and quantity of the compounds present are unknown to users.

7. Hong Kong noted the first seizure of synthetic cannabinoids in June 2010 when the police seized seven sachets containing a total of about 22 grammes of a plant material containing a synthetic cannabinoid

commonly known as "JWH-018". Whilst there is still no evidence suggesting that abuse of these substances has gained prevalence in Hong Kong, as a precautionary measure, we propose to subject synthetic cannabinoids to legislative control taking reference from overseas practice.

### *Derivatives of Cathinone*

8. Derivatives of cathinone have gained prevalence in Europe as substances of abuse, particularly in the United Kingdom (UK). A 2009 UK survey ranked these drugs the fourth most commonly used drug, following cannabis, ecstasy and cocaine. Amongst the different derivatives of cathinone, mephedrone is reportedly the most common one. Mephedrone and other derivatives of cathinone can be snorted or taken orally and are often used along with other drugs of abuse such as cocaine, cannabis, ketamine and ecstasy.

9. Hong Kong noted the first seizure of derivative of cathinone in June 2010 when the police seized 0.47 grammes of powder mephedrone.

10. According to DH, the derivatives of cathinone act as central nervous system stimulants, and would cause euphoria, elevated mood, altered level of consciousness, memory problems, blood circulation problems, erratic behaviour, hallucinations and delusions to the abusers. There have been reported cases of acute toxicity with fatalities suspected to be associated with the use of mephedrone in Europe including the UK, as well as in Taiwan.

11. Among the derivatives of cathinone –

- (a) amfepramone, an appetite suppressant, is a dangerous drug listed in Part I of the First Schedule to the DDO;
- (b) methcathinone, which has no known medical use, is a dangerous drug listed in Part I of the First Schedule to DDO; and
- (c) bupropion, an antidepressant and an aid to quit smoking, has only mild psychoactive effect according to the expert advice of DH and therefore does not warrant to be made a dangerous drug.

### Existing Control

12. Derivatives of piperazine and synthetic cannabinoids are not at present under the control of the laws of Hong Kong. Save for those listed in para. 11 above, derivatives of cathinone are currently not under the control of the laws of Hong Kong.

### Trade Situation

13. Between 1 January 2008 and 30 September 2010, there was only one trade declaration lodged concerning the export of one kilogram of one kind of derivative of piperazine amongst the synthetic substances proposed to be controlled in the present exercise. Thus, the impact of the proposed control on trade would be negligible.

### Proposed amendment

14. The proposed amendment will specify the abovementioned substances as dangerous drugs and impose strict control on trafficking, manufacture, possession, supply, import and export of these substances. The manufacture, import and export of these substances will require a licence from the Director of Health. Should the proposed amendment be adopted, maximum penalties for illicit trafficking and manufacture of these substances are a fine of \$5 million and life imprisonment. Possession and consumption of these substances will be subject to a maximum fine of \$1 million and imprisonment for seven years.

### ***1-[(2-Chlorophenyl)-N-(methylimino)methyl]cyclopentanol, and its salts***

15. 1-[(2-Chlorophenyl)-N-(methylimino)methyl]cyclopentanol and its salts ("the substances") are immediate precursor chemicals for ketamine, which is classified as a dangerous drug under control of the DDO. The substances can be used for production of ketamine easily through simple processes. They have no pharmaceutical value and have no known medicinal uses either. The substances have already been subject to legislative control as precursor chemicals for the manufacturing of ketamine on the Mainland and in Taiwan.

### Existing Control

16. The substances are not at present under the control of the laws of Hong Kong.

### Trade situation

17. There was no trade declaration lodged on the substances between 1 January 2008 and 30 September 2010, suggesting that import or export of those substances has been rare, if any.

### Proposed Amendment

18. The proposed amendment will subject the manufacture, import / export and transshipment of the substances to legislative control, i.e. the manufacture, import, export and storage of the substances will require a licence / storage approval from the Commissioner of Customs and Excise. The amendment will also make it illegal, by virtue of section 2A of the CCO, to be in possession, manufacture, transport or distribute the substances for the purpose of unlawful production of dangerous drugs. Maximum penalty will be a fine of \$1 million and imprisonment for 15 years.

## **CONSULTATION**

19. The Administration has consulted the Action Committee Against Narcotics and has obtained its support for the proposed amendments. The Administration has also sought the views of the pharmaceutical, chemical, shipping, logistics and cargo trades, as well as licensees and storage approval holders for controlled chemicals on the proposed amendments. No objection has been raised.

## **RECOMMENDATION**

20. In the light of the above, the Administration recommends –
- (a) including the derivatives of piperazine; synthetic cannabinoids; and derivatives of cathinone in Part I of the First Schedule to the DDO; and
  - (b) including 1-[(2-Chlorophenyl)-N-(methylimino)methyl] cyclopentanol and its salts in Schedule 2 to the CCO.

**WAY FORWARD**

21. Subject to Members' views, we will invite the Chief Executive to make the amendments to the First schedule to DDO pursuant to section 50 of DDO, and the Secretary for Security to make the amendment to Schedule 2 to CCO pursuant to section 18A of CCO as soon as practicable.

22. Subject to the above mentioned statutory procedures, we expect the two amendment orders to be tabled at Legislative Council for negative vetting in early 2011 so that these new substances of abuse and precursor chemical could be subject to proper control.

**ADVICE SOUGHT**

23. Members are invited to comment on and support the Administration's recommendations in para. 20 above.

**Narcotics Division, Security Bureau  
4 November 2010**

**Annex A****Derivatives of piperazine**

1. 1-Benzylpiperazine
2. any compound (not being a compound for the time being specified in paragraph 1(a) of Part I of the First Schedule to the *Dangerous Drugs Ordinance* (Cap.134)) structurally derived from 1-benzylpiperazine or 1-phenylpiperazine by modification in any of the following ways:
  - (i) by substitution at the second nitrogen atom of the piperazine ring with alkyl, benzyl, haloalkyl or phenyl groups;
  - (ii) by substitution in the aromatic ring to any extent with alkyl, alkoxy, alkylendioxy, halide or haloalkyl groups

**Synthetic cannabinoids**

1. [2,3-Dihydro-5-methyl-3-(4-morpholinylmethyl)pyrrolo[1, 2, 3-de]-1,4-benzoxazin-6-yl]-1-naphthalenylmethanone.
2. 3-Dimethylheptyl-11-hydroxyhexahydrocannabinol.
3. [9-Hydroxy-6-methyl-3-[5-phenylpentan-2-yl]oxy-5, 6, 6a, 7, 8, 9, 10, 10a-octahydrophenanthridin-1-yl] acetate.
4. 9-(Hydroxymethyl)-6,6-dimethyl-3-(2-methyloctan-2-yl)-6a, 7, 10, 10a-tetrahydrobenzo[c]chromen-1-ol.
5. Nabilone
6. Any compound (not being a compound for the time being specified in paragraph 1(a) of Part I of the First Schedule to the *Dangerous Drugs Ordinance* (Cap.134)) structurally derived from 3-(1-naphthoyl)indole or 1H-indol-3-yl-(1-naphthyl)methane by substitution at the nitrogen atom of the indole ring by alkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl or 2-(4-morpholinyl)ethyl, whether or not further substituted in the indole ring to any extent and whether or not substituted in the naphthyl ring to any extent.
7. Any compound (not being a compound for the time being specified in paragraph 1(a) of Part I of the First Schedule to the *Dangerous Drugs Ordinance* (Cap.134)) structurally derived from 3-(1-naphthoyl)pyrrole by substitution at the nitrogen atom of the pyrrole ring by alkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl or 2-(4-morpholinyl)ethyl, whether or not further substituted in the pyrrole ring to any extent and whether or not substituted in the naphthyl ring to any extent.
8. Any compound (not being a compound for the time being specified in paragraph 1(a) of Part I of the First Schedule to the *Dangerous Drugs Ordinance* (Cap.134)) structurally derived from 1-(1-naphthylmethyl)indene by substitution at the 3-position of the indene ring by alkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl or 2-(4-morpholinyl)ethyl, whether or not further substituted in the indene ring to any extent and whether or not substituted in the naphthyl ring to any extent.
9. Any compound (not being a compound for the time being specified in paragraph 1(a) of Part I of the First Schedule to the *Dangerous Drugs Ordinance* (Cap.134)) structurally derived from 3-phenylacetylindole by substitution at the nitrogen atom of the indole ring with alkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl or 2-(4-morpholinyl)ethyl, whether or not further substituted in the indole ring to any extent and whether or not substituted in the phenyl ring to any extent.



10. Any compound (not being a compound for the time being specified in paragraph 1(a) of Part I of the First Schedule to the *Dangerous Drugs Ordinance* (Cap.134)) structurally derived from 2-(3-hydroxycyclohexyl)phenol by substitution at the 5-position of the phenolic ring by alkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl or 2-(4-morpholinyl)ethyl, whether or not further substituted in the cyclohexyl ring to any extent.

**Derivatives of cathinone**

Any compound (not being bupropion or a compound for the time being specified in paragraph 1(a) of Part I of the First Schedule to the *Dangerous Drugs Ordinance* (Cap.134)) structurally derived from 2-amino-1-phenyl-1-propanone by modification in any of the following ways

- (i) by substitution in the phenyl ring to any extent with alkyl, alkoxy, alkylendioxy, haloalkyl or halide substituents, whether or not further substituted in the phenyl ring by one or more other univalent substituents;
- (ii) by substitution at the 3-position with an alkyl substituent;
- (iii) by substitution at the nitrogen atom with alkyl or dialkyl groups, or by inclusion of the nitrogen atom in a cyclic structure.