File Ref: ESB CR 15/951/49

LEGISLATIVE COUNCIL BRIEF

Air Navigation (Hong Kong) Order 1995 (Chapter 448 Subsidiary Legislation)

AIR NAVIGATION (HONG KONG) (AMENDMENT OF SCHEDULE 16) ORDER 2001

INTRODUCTION

Annex A

At the meeting of the Executive Council on 30 October 2001, the Council ADVISED and the Chief Executive ORDERED that the Air Navigation (Hong Kong) (Amendment of Schedule 16) Order 2001 at Annex A, be made under Article 44 of the Air Navigation (Hong Kong) Order 1995.

BACKGROUND AND ARGUMENT

Background

2. The Convention on International Civil Aviation sets out the requirements for the transport of dangerous goods¹ by air to ensure aviation safety. These cover aspects such as classification, packing, marking, labelling and loading. Whilst the general requirements are set out in Annex 18 to the Convention, detailed provisions are contained in Technical Instructions (Instructions) which are updated and published by the International Civil Aviation Organization (ICAO)² every two years. The latest edition (2001-2002) of the Instructions, issued in March 2001, came into effect on 1 July 2001 and will remain in force until the promulgation of a new edition.

Dangerous goods include explosives, flammable liquids and solids, oxidizing substances, radioactive materials, corrosive materials, etc.

² ICAO was established by the Convention on International Civil Aviation and is the world's most important organisation in the field of civil aviation. At present, there are 187 Contracting States. The objectives of ICAO are to promote the development of international civil aviation in a safe and orderly manner, and to ensure that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically.

- 3. In Hong Kong, these international requirements are given legal effect through two sets of local regulations, namely:
 - (a) Schedule 16 to the Air Navigation (Hong Kong) Order 1995 (AN(HK)O) (Cap. 448 sub. leg. C) (which is cited as the Air Navigation (Dangerous Goods) Regulations), at **Annex B**; and
 - (b) the Dangerous Goods (Consignment by Air) (Safety) Regulations made under section 3 of the Dangerous Goods (Consignment by Air) (Safety) Ordinance (Cap. 384).

Both sets of Regulations make reference to specific chapters and parts of the Instructions.

2001-2002 Edition of the Instructions

4. The present Instructions make considerable format and numbering change to the last edition. Other changes are technical in nature. The major changes are summarised below.

(A) Alignment with other international requirements

5. To ensure that the requirements for the safe transport of dangerous goods by air are comparable to those for transport by sea or by land, the provisions in the Instructions have been modified to mirror those in the "United Nations Recommendations on the Transport of Dangerous Goods" (UN Recommendations) and the "International Atomic Energy Agency Regulations for the Safe Transport of Radioactive Materials" (IAEA Regulations). Examples of these modifications include regrouping various provisions in the Instructions to follow the format of the relevant UN Recommendations, adopting the definition and packaging requirements of the IAEA Regulations for radioactive materials, excluding from the Instructions radioactive materials implanted or incorporated in a person for diagnosis or treatment purposes, and repealing the provision which permits a freight container to be used simultaneously as packaging for radioactive materials.

(B) Exemption

6. For some dangerous goods, the requirements for their safe carriage by air are also set out in other airworthiness or flight operation regulations. These include specialised refrigeration units (which may contain liquefied gases), fire extinguishers and aviation fuel. To avoid duplication, the

Annex B

Instructions introduce an exemption provision for this group of dangerous goods.

(C) Reference to other international standards

7. The previous edition had detailed provisions about the testing methods and procedures for ascertaining dangerous goods classification. The Instructions now only make reference to the "United Nations Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria". These are by and large similar to the testing methods and procedures stipulated in the previous edition.

(D) Clarification of shippers' responsibilities

8. The Instructions introduce specific requirements for the shippers to mark and label empty packaging and mixed packaging. For example, when two or more types of dangerous goods are packed within the same outer packaging, the latter must be labelled and marked as required for each type. These identification, marking and labelling requirements also apply to empty packaging unless it has been properly cleaned to nullify any hazard.

Amendment

9. Both Schedule 16 to the AN(HK)O and the Dangerous Goods (Consignment by Air) (Safety) Regulations need to be amended in order to bring local requirements in line with the latest Instructions. The former is amended by the Order at Annex A made by the Chief Executive under Article 44³ of the AN(HK)O. The latter are amended by an order made by the Director-General of Civil Aviation under section 9 of the same Regulations. Both orders will be gazetted on 9 November 2001.

THE ORDER

- 10. The main provisions of the Order are as follows:
 - (a) Section 1(a) updates the definition of "dangerous goods", "States concerned" and "Technical Instructions";

Annex A

Article 44 of the Air Navigation (Hong Kong) Order 1995 provides that the Chief Executive may make regulations which supplement, amend or replace the regulations set out in the said Schedule 16 subject to certain provisoes.

- (b) Section 1(b) updates references to the relevant parts of the Instructions which introduce the exemption provision referred to in paragraph 6; and
- (c) Section 1(e), (f), (g)(ii) and g(iii)(B) updates references to the relevant parts of the Instructions regarding the responsibilities of aircraft operators or their agents, such as inspection and loading of dangerous goods, provision of information to passengers and training to their employees.
- 11. There are some overlapping requirements in Schedule 16 to the AN(HK)O and the Dangerous Goods (Consignment by Air) (Safety) Regulations concerning shippers' responsibilities. The opportunity is taken to remove such overlapping by deleting the relevant provisions in Schedule 16 through section 1(c)(ii), (d), (g)(i) and (g)(iii)(A).
- 12. The Order will come into effect on 9 November 2001 when it will be published in the Gazette. This will enable Hong Kong to adopt as soon as possible the latest international requirements for the transport of dangerous goods by air.

BASIC LAW IMPLICATIONS

13. The Department of Justice advised that the Order is consistent with the Basic Law.

HUMAN RIGHTS IMPLICATIONS

14. The Department of Justice advised that the Order has no human rights implications.

BINDING EFFECT OF THE LEGISLATION

15. The Order will not affect the current binding effect of the Regulations.

FINANCIAL AND STAFFING IMPLICATIONS

16. There are no financial or staffing implications for the Government arising from the Order.

ECONOMIC IMPLICATIONS

17. The ICAO had taken into account the views of the industry and relevant experts when preparing the Instructions. The industry should be fully prepared for the implementation of the new requirements and have already incorporated the Instructions into its handbook, viz the International Air Transport Association Dangerous Goods Regulations. Hence, the Order should not give rise to any significant economic implications.

LEGISLATIVE TIMETABLE

18. The legislative timetable will be -

Publication in Gazette 9 November 2001 Tabling at the Legislative Council 14 November 2001

PUBLICITY

19. A press release will be issued.

ENQUIRIES

20. For enquiries on this brief, please contact Miss Priscilla Lam, Chief Safety Officer (Civil Aviation), at 2182 1228.

Economic Services Bureau November 2001 (ESB CR 15/951/49)

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Air Navigation (Hong Kong) (Amendment of Schedule 16) Order 2001

(Made by the Chief Executive under Article 44 of the Air Navigation (Hong Kong) Order 1995 (Cap. 448 sub. leg.) after consultation with the Executive Council)

- The Air Navigation (Dangerous Goods) Regulations Schedule 16 to the Air Navigation (Hong Kong) Order 1995 (Cap. 448 sub. leg.)
 is amended---
- (a) in Regulation 2(1)---
- (i) in the definition of "dangerous goods", by adding "or 3" after "Part 2":
- (ii) in the definition of "States concerned", by repealing "1.1.1" and substituting "1.1.2";
- (iii) in the definition of "Technical Instructions", by repealing "1999--2000" and substituting "2001--2002";
- (b) in Regulation 3---
 - (i) in paragraph (3)---
- (A) by repealing everything from "Chapter 1.1.2(a)" to "Part 9 and" and substituting "Chapter 1.1.3(a), 1.1.3(b), 1.1.3(d), 1.1.3(e), 1.1.3(f) or 2.2 of Part 1 or Chapter 1.1.2 of Part 8 of the Technical Instructions which are carried, loaded or suspended in accordance with the provisions of such Chapters, and":
- (B) in subparagraph (e), by repealing "or";
- (C) by adding---
- "(ea) required for the airworthiness, safe operation or propulsion of the aircraft or the operation of its specialized equipment during flight; or";
- (D) in the first proviso, by repealing "sub-paragraphs (c), (d) and (e)" and substituting "sub-paragraph (c), (d), (e) or (ea)";
- (E) by repealing everything after "that flight" and substituting--- $^{"}\cdot$

Provided that goods specified in sub-paragraph (f) shall only be carried if all the following requirements are met---

- (i) authorizations have been given by the appropriate authorities of the States concerned, and the appropriate authorities of the States concerned have prescribed specific terms and conditions for the particular operator's operation;
 - (ii) vehicles are secured in an upright position;
- (iii) fuel tanks are so filled as to prevent spillage of fuel during loading, unloading and transit; and
- (iv) adequate ventilation rates are maintained in the aircraft compartment in which the vehicle is carried.";
 - (ii) in paragraph (4)---
- (A) by repealing "Part 5" and substituting "Part 7";
- (B) by repealing "2.5" and substituting "2.4";

- (c) in Regulation 4---
 - (i) by adding "Documentation" as the heading;
 - (ii) by repealing paragraphs (2) and (3);
- (d) by repealing Regulation 5;
- (e) in Regulation 6---
- (i) in paragraph (1)(a), by repealing everything from "Chapter 2.6" to "Part 4" and substituting "Part 4 and Chapters 2 and 4 of Part 3 as relate to marking and labelling, and Chapters 1.6, 1.7, 1.8, 2 and 3 of Part 5";
 - (ii) in paragraph (6), by repealing "5" and substituting "7";
- (f) in Regulation 7, by repealing "5" where it twice appears and substituting "7":
- (g) in Regulation 8---
 - (i) in the heading, by repealing "and shippers";
 - (ii) in paragraph (1), by repealing "5" and substituting "7";
 - (iii) in paragraph (3)---
- (A) by repealing "and a shipper of dangerous goods by air and, in each case, any agent thereof" and substituting "and his agent";
- (B) by repealing "1 of Part 6" and substituting "4 of Part 1".
- Ms. Sandra LEE

Secretary for Economic Services

5 November 2001

Explanatory Note

This Order amends Schedule 16 to the Air Navigation (Hong Kong) Order 1995 (Cap. 448 sub. leg.)---

- (a) to give effect to the 2001--2002 edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air approved by the International Civil Aviation Organization; and
- (b) to repeal requirements which have already been covered by the Dangerous Goods (Consignment by Air) (Safety) Regulations (Cap. 384 sub. leg.).

Annex B

Chapter: 448C Title: AIR NAVIGATION (HONG Gazette L.N. 179 of

KONG) ORDER 1995 Number: 1999

Schedule: **16** Heading: **THE AIR NAVIGATION** Version Date: 09/07/1999

(DANGEROUS GOODS) REGULATIONS

Remarks:

Adaptation amendments retroactively made - see 36 of 1999 s. 3

Article 44

1. Citation

These Regulations may be cited as the Air Navigation (Dangerous Goods) Regulations.

2. Interpretation

(1) In these Regulations:-

- "appropriate authority" means any authority designated, or otherwise recognized by a State concerned to perform specific functions related to provisions contained in the Technical Instructions; (L.N. 179 of 1999)
- "consignment" means one or more packages of dangerous goods accepted by an operator from one shipper at one time and at one address receipted for in one lot and moving to one consignee at one destination address;
- "dangerous goods" means any article or substance which is capable of posing significant risk to health, safety or property when carried by air and which is classified in Part 2 of the Technical Instructions:
- "dangerous goods transport document" means a document, not being an air waybill, which is required by Regulation 4 of these Regulations to accompany a consignment of dangerous goods;
- "package" means the packaging and the articles and substances contained therein including one or more packages which have been consolidated by one shipper into one container or enclosure for convenience in handling;
- "packing" means the art and operation whereby articles and substances are wrapped up, enclosed in containers or otherwise secured, and "packed" shall be construed accordingly;
- "States concerned" has the same meaning as it has in Chapter 1.1.1 of Part 1 of the Technical Instructions; (L.N. 179 of 1999)
- "Technical Instructions" means the 1999-2000 English language edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air approved and published by decision of the Council of the International Civil Aviation Organization; (L.N. 150 of 1997; L.N. 179 of 1999)
- "unit load device" means any type of freight container including any container designed for loading on an aircraft.
- (2) For the avoidance of doubt, any instructions or limitations contained in the Technical Instructions for the carriage of dangerous goods on passenger or cargo aircraft, as therein defined, shall for the purpose of these Regulations be interpreted as applying also to the carriage of such goods beneath passenger or cargo aircraft respectively.

3. Carriage of dangerous goods

- (1) An aircraft shall not carry or have loaded therein or suspended thereunder any dangerous goods, unless such goods are carried, loaded or suspended;
 - (a) with the written permission of the Chief Executive and in accordance with any conditions to which such permission may be subject; and (36 of 1999 s. 3)
 - (b) in accordance with the Technical Instructions and any conditions specified therein.
 - (2) A person shall not-
 - (a) take or cause to be taken on board,
 - (b) suspend or cause to be suspended beneath, or
 - (c) deliver or cause to be delivered for loading on or suspension beneath (L.N. 179 of 1999)

an aircraft any goods which he knows or ought to know or suspect to be goods capable of posing significant risk to health, safety or property when carried by air, unless the provisions of these Regulations are complied with.

- (3) These Regulations shall not apply to dangerous goods of a type specified in Chapter 1.1.2(a), 1.1.2(b), 1.1.2(d), 1.1.2(e) and 2.3 of Part 1 and Chapter 1.2 of Part 9 of the Technical Instructions which are carried, loaded or suspended in accordance with the provisions of the aforesaid Chapters 1.1.2(a), 1.1.2(b), 1.1.2(d), 1.1.2(e) and 2.3 of Part 1 and Chapter 1.2 of Part 9 and which are- (L.N. 179 of 1999)
 - (a) articles and equipment which are required to be carried on an aircraft by or under the Order or are otherwise intended for use on an aircraft for the purpose of the good order of the flight in accordance with normal practice whether or not, in either case, such articles and equipment are required to be carried or intended to be used on that particular flight;
 - (b) solely intended for the use of passengers or crew members or for sale to the passengers or crew members of the aircraft during the flight in question;
 - (c) to provide during the flight veterinary aid or a humane killer for an animal; (L.N. 179 of 1999)
 - (d) to provide during the flight medical aid to a person; (L.N. 179 of 1999)
 - (e) to provide, during flight, aid in connection with search and rescue operations; or (L.N. 179 of 1999)
 - (f) vehicles which are carried in aircraft designed or modified for vehicle ferry operations; (L.N. 179 of 1999)
 - Provided that goods specified in sub-paragraphs (c), (d) and (e) shall only be carried if- (L.N. 179 of 1999)
 - (i) they are or may be required for use during the flight;
 - (ii) they are or may be required for use during a subsequent flight by the same aircraft and it will not be practicable to load the goods on the aircraft in the intervening period before the commencement of that subsequent flight; or
 - (iii) they were used or might have been required for use during a previous flight by the same aircraft and it has not been practicable to unload them from the aircraft since that flight; (L.N. 179 of 1999)

Provided that goods specified in sub-paragraph (f) shall only be carried if all the following requirements are met-

- (aa) authorizations have been given by the appropriate authorities of the States concerned, and the appropriate authorities of the States concerned have prescribed specific terms and conditions for the particular operator's operation;
- (bb) vehicles are secured in an upright position;
- (cc) fuel tanks are so filled as to prevent spillage of fuel during loading, unloading and transit; and
- (dd) adequate ventilation rates are maintained in the aircraft compartment in which the vehicle is carried. (L.N. 179 of 1999)
- (4) Save for Regulations 3(1)(a), 7(1) but only to the extent that it refers to the provisions in Chapter 2.1 of Part 5 of the Technical Instructions and 7(2) and 8(3) of these Regulations, these

Regulations shall not apply to dangerous goods of the classifications specified in Chapter 2.5 of Part 1 of the Technical Instructions provided that:

- (a) the dangerous goods do not exceed the appropriate quantity limitations specified therein; and
- (b) such other conditions as are specified therein are complied with.
- 4. (1) An aircraft shall not carry dangerous goods as cargo unless the shipper of the goods has furnished the operator of the aircraft with a dangerous goods transport document, except that such a document shall not be required in respect of such categories of dangerous goods as may be specified in the Technical Instructions as being goods in respect of which a dangerous goods transport document is not required.
- (2) The dangerous goods transport document shall be completed in duplicate by the shipper and shall:
 - (a) describe the dangerous goods in accordance with and contain such information as is required by the provisions of Chapter 4.1 of Part 4 of the Technical Instructions;
 - (b) contain a signed declaration that the Technical Instructions have been complied with in that the dangerous goods-
 - (i) are fully and accurately described, and
 - (ii) are correctly classified, packed, marked and labelled, and
 - (iii) are in a proper condition for carriage by air.
- (3) The shipper of dangerous goods shall furnish the operator of the aircraft with such other documents in respect of dangerous goods as are required by Part 3 and Chapters 4.3 and 4.5 of Part 4 of the Technical Instructions.
- (4) The operator of an aircraft shall preserve for not less than six months any dangerous goods transport document or other document in respect of dangerous goods which has been furnished to him in accordance with this Regulation.

5. Shipper's responsibilities

Before consigning any package containing dangerous goods for carriage by air the shipper shall ensure that:

- (a) the goods are not of a category whose carriage by air is prohibited by the provisions of Chapters 2.1 and 2.2 of Part 1 of the Technical Instructions; (L.N. 150 of 1997; L.N. 179 of 1999)
- (b) the goods are classified and packed in accordance with Chapter 2.6 of Part 1 and Parts 2, 3 and 8 of the Technical Instructions and the packagings used are in accordance with such provisions of Part 7 of the Technical Instructions as apply to the goods;
- (c) the package is marked and labelled in accordance with such provisions of Chapter 2.6 of Part 1, Chapter 11 of Part 2 and Part 3 as relate to marking and labelling and in accordance with Chapters 1.6, 2 and 3 of Part 4 of the Technical Instructions; (L.N. 150 of 1997)
- (d) the package is in a fit condition for carriage by air;
- (e) the dangerous goods transport document required by Regulation 4 of these Regulations has been completed and that the declaration therein has been signed by him or on his behalf.

6. Operator's responsibilities

- (1) The operator of an aircraft in which any package or unit load device containing dangerous goods is to be carried shall satisfy himself by making an inspection:
 - (a) that the package is marked and labelled in accordance with the provisions of these

Regulations, such provisions of Chapter 2.6 of Part 1, Chapter 11 of Part 2 and Part 3 as relate to marking and labelling and Chapters 1.6, 2 and 3 of Part 4 of the Technical Instructions before accepting the package; (L.N. 150 of 1997)

- (b) that the package is not leaking or damaged so that the contents may escape-
 - (i) before accepting the package;
 - (ii) before loading or causing the package to be loaded on board the aircraft or before suspending or causing the package to be suspended beneath the aircraft, as the case may be;
 - (iii) upon loading the package from or from beneath the aircraft;
- (c) that the unit load device is free from any evidence of leakage from or damage to any dangerous goods contained therein before loading or causing the unit load device to be loaded on board the aircraft or before suspending or causing the unit load device to be suspended beneath the aircraft, as the case may be.
- (2) (a) For the purpose of each of the inspections required by paragraph (1)(a) and (1)(b)(i) of this Regulation, an acceptance check list shall be used and the results of that inspection shall be recorded in accordance with the form thereof.
 - (b) The acceptance check list shall be in such form and shall provide for the entry of such details as will enable the relevant inspection to be fully and accurately made by reference to and completion of that list.
 - (c) The operator of an aircraft shall preserve for not less than six months a record of any acceptance check list completed in accordance with this Regulation. The record shall be in a legible or a non-legible form so long as the recording is capable of being reproduced in legible form.
- (3) The operator shall not load or cause to be loaded on an aircraft or suspend or cause to be suspended beneath an aircraft any package or unit load device containing dangerous goods which on inspection is found to be leaking or damaged so that the contents or the dangerous goods therein may escape or be damaged.
- (4) The operator shall unload or cause to be unloaded any package containing dangerous goods which appears to be leaking or damaged on board or beneath an aircraft and shall ensure other cargo or baggage loaded or suspended beneath that aircraft is in a fit state for carriage by air and has not been contaminated.
- (5) The operator shall after unloading inspect for signs of damage or contamination in any part of the aircraft, or any sling or other apparatus which has been used to suspend goods beneath the aircraft, in which:
 - (a) a unit load device containing dangerous goods was stowed, or
- (b) any damaged or leaking package containing dangerous goods was loaded, and the operator shall remove or repair any contamination or damage.
- (6) The operator of an aircraft shall not permit it to fly for the purpose of carrying passengers or cargo if he knows or suspects radioactive materials to have leaked in or contaminated the aircraft or any sling or other apparatus attached to the aircraft unless the radiation level resulting from the fixed contamination at any accessible surface and the non-fixed contamination are not more than the values specified in Chapter 3.2 of Part 5 of the Technical Instructions.

7. Method of loading by operator

- (1) The operator shall ensure that any package containing dangerous goods is loaded, stowed and unloaded from or from beneath an aircraft in accordance with the provisions in Chapter 2 of Part 5 of the Technical Instructions which apply to that category of dangerous goods.
- (2) An aircraft shall not carry any dangerous goods either in any compartment occupied by passengers or in the flight crew compartment, except in circumstances permitted by the provisions of Chapter 2.1 of Part 5 of the Technical Instructions.

- 8. Provisions of information and training programmes by operators and shippers
- (1) The operator of an aircraft in which dangerous goods are to be carried shall, before the flight begins, provide the commander of the aircraft with written information specifying the matters required by the provisions of Chapter 4.1 of Part 5 of the Technical Instructions and shall preserve a copy thereof for not less than six months.
- (2) The operator of an aircraft in which passengers are to be carried or his agent shall notify them of the categories of dangerous goods which may not be taken on board an aircraft either as checked baggage or accompanying a passenger by the provision of information with each passenger ticket which shall be sufficient in prominence for this purpose and by displaying notices, sufficient in number and prominence for this purpose, at each of the places at an airport where the operator or his agent issues tickets, checks in baggage or maintains areas to assemble passengers to board the aircraft.
- (3) The operator of an aircraft and a shipper of dangerous goods by air and, in each case, any agent thereof shall inform any of their respective employees whose duties include a function connected with the carriage of passengers or cargo by air of the provisions of the Technical Instructions and for this purpose shall establish and undertake training programmes, as required by Chapter 1 of Part 6 of the Technical Instructions, which shall be submitted to the Chief Executive for approval on such occasions as the Chief Executive may require and which shall be amended as the Chief Executive may require. (36 of 1999 s. 3)

9. Production of documents and records

The operator of an aircraft shall, within a reasonable time after being requested so to do by an authorized person, cause to be produced to that person such of the following documents as may have been requested by that person-

- (a) the written permission referred to in Regulation 3(1) of these Regulations;
- (b) the dangerous goods transport document or other document in respect of any dangerous goods referred to in Regulation 4 of these Regulations;
- (c) the completed acceptance check list in a legible form in respect of any dangerous goods, referred to in Regulation 6(2) of these Regulations;
- (d) a copy of the written information provided to the commander of the aircraft in respect of any dangerous goods, referred to in Regulation 8(1) of these Regulations.

10. Dropping articles for agricultural, horticultural, forestry or pollution control purposes

Subject to the provisions of Regulation 3(1)(a) of these Regulations, nothing in these Regulations shall apply to any aircraft flying in order to drop articles for the purpose of agriculture, horticulture, forestry or pollution control.

The following Table shows, in relation to each Article of this Order, the corresponding Article in the Air Navigation (Overseas Territories) Order 1977, as amended.