

DANGEROUS GOODS PANEL (DGP)**NINETEENTH MEETING****Montreal, 27 October to 7 November 2003****Agenda Item 2 Development of recommendations for amendments to the Technical
: Instructions for incorporation in the 2005/2006 edition****SECURITY**

(Presented by G. A. Leach)

1. BACKGROUND

1.1 Following the information exchange meeting held on 3 & 4 September to discuss the adoption by ICAO of the new UN Model Regulation on the security of dangerous goods in transport, the task of the Panel is now to make a decision taking into account the information and arguments tabled at that meeting. The purpose of this paper is to suggest to the Panel that Annex 17 is the most appropriate location for the UN text. Unlike the other modes of transport, aviation has well established security provisions that are far more comprehensive than those proposed by the UN. The UN text is related to the security of dangerous goods, as opposed to the properties of those goods. The subject of security is an essential element of safeguarding civil aviation and it is imperative that it is dealt with by experts. ICAO has security experts and these are in the AVSEC Panel. It is inappropriate for the Dangerous Goods Panel, which has no expertise in the subject of security, to be given lead responsibility in this area.

**2. ANNEX 17 AND THE SECURITY MANUAL
FOR SAFEGUARDING CIVIL AVIATION
AGAINST ACTS OF UNLAWFUL INTERFERENCE**

2.1 In considering the arguments in favour of Annex 17 adoption of the UN text, it is useful first to look at the primary intent of the UN text which is:

- a) to prevent the mode of transport carrying dangerous goods from being used as a weapon;
- and

- b) to protect dangerous goods against theft whilst in transport for mis-use not necessarily against the mode of transport.

2.2 With respect to a) ICAO already has extensive measures in place via Annex 17 to prevent an aircraft from being hi-jacked. It is therefore contended that there is no need for ICAO to adopt fresh text that duplicates the intent of existing Annex 17 standards.

2.3 With respect to b) the question of whether the UN text came within the remit of ICAO was discussed at the information exchange meeting. The attention of the meeting was drawn to Article 44 a) and h) of the Convention:

"The aims and objectives of the Organization are to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport so as to:

- a) Insure the safe and orderly growth of international civil aviation throughout the world;
- h) Promote safety of flight in international civil aeronautics."

2.4 It was explained that these provisions gave ICAO a very far reaching mandate to encompass many topics affecting aviation. However, it is queried how the wording of a) and h) of Article 44 would provide for ICAO to extend its remit to, say, the theft from a shipper or operator of dangerous goods which were then used to commit a terrorist offence in a shopping mall. Nevertheless, it is suggested that Annex 17 already addresses this issue as it relates to the security of cargo within an airport and in respect of cargo on passenger aircraft:

"4.5.1 Each Contracting State shall ensure the implementation of measures at airports serving international civil aviation to protect cargo, baggage, mail, stores and operator's supplies being moved within an airport and intended for carriage on an aircraft to safeguard such aircraft against an act of unlawful interference.

4.5.2 Each Contracting State shall establish measures to ensure that cargo, courier and express parcels and mail intended for carriage on passenger flights are subjected to appropriate security controls.

4.5.3 Each Contracting State shall establish measures to ensure that operators do not accept consignments of cargo, courier and express parcels or mail for carriage on passenger flights unless the security of such consignments is accounted for by a regulated agent or such consignments are subjected to other security controls to meet the requirements of 4.5.2."

2.5 In respect of the detail of the UN text that goes beyond the principle objectives set down in Annex 17, at the information exchange meeting it was explained that the Security Manual did not have the same status as the Technical Instructions in that it was guidance rather than mandatory text. However, the Panel's attention is drawn to page I-1 "Introduction" which states that implementation of the Security Manual will ensure that a state meets its obligations as signatories to the Aviation Security Conventions. Clearly the expectation is that the Security Manual will form the basis of each state's National Aviation Security

Programme, the vehicle through which, together with national legislation, the objectives of Annex 17 are delivered.

2.6 Notwithstanding the arguments in favour of Annex 17 adoption of the UN text, the information exchange meeting recognised three important gaps, namely theft of dangerous goods, and the need to extend security provisions to a) shippers and b) cargo aircraft. The following comments are made:

2.7 *Theft* - as stated previously it is contested that (with the possible exception of the theft of goods from an aircraft, or from within the secure area of an airport, where such theft could suggest poor general protection of aircraft) theft is outside of the remit of ICAO and should not be addressed by either Annex 17 or 18;

2.8 *Extending security provisions to shippers* – if it is accepted that this needs to be done, Annex 17 (Section 4.5) would have to be amended accordingly. As outlined in the previous paragraph, however, it is questioned why a shipper needs to be subject to air transport security requirements. This may be appropriate for the land mode of transport, where a breakdown in security could result in a vehicle carrying dangerous goods being used as a weapon, but it is not clear how a similar breakdown in shipper security could affect civil aviation.

2.9 It should also be recognised that much of the new UN text applies to all shippers of all types of dangerous goods (not only "high consequence" dangerous goods) irrespective of quantity. Whilst it might be understandable to apply security provisions to high consequence dangerous goods (of which there are only 120 permitted for carriage in normal circumstances listed in Table 3-1), it is queried what justification there is for imposing any security provisions on the remaining 2300+ non high consequence items (which include many relatively innocuous items such as dry ice, vehicles, paint, alcoholic beverages etc) when, using UN terminology, they are not capable of producing "serious consequences such as mass casualties or mass destruction."

2.10 *Extending security provisions to cargo aircraft* – Annex 17 and the Security Manual address the security of cargo on passenger aircraft only. Consequently there is a need to add a new standard to Annex 17 to address this although such a change could be limited so as to apply only to cargo aircraft carrying dangerous goods. This change, to introduce security requirements in respect of dangerous goods being carried on cargo aircraft, will have to be effected whether the UN text is adopted in Annex 17 or Annex 18 and the Technical Instructions.

3. ANNEX 18 AND THE TECHNICAL INSTRUCTIONS

3.1 It has been suggested that the UN text be added to the Technical Instructions and this has the support of the ICAO Legal Bureau. Including the text in the Technical Instructions does appear to have some attractions but it is suggested that these are borne primarily of convenience and expediency, rather than practicality. Three perceived benefits have been identified:

3.2 i) *Enforceability*

3.2.1 It has been suggested that the Technical Instructions is preferable to the Security Manual because it is a more "enforceable" document. However, in many respects the wording of the UN text, if

adopted as written, is so general as to be unenforceable in practice, without further clarification in national legislation or guidance eg

"1.4.1.1 All persons engaged in the transport of dangerous goods shall consider security requirements for the transport of dangerous goods commensurate with their responsibilities."

3.2.2 This could not be enforced directly in, for example, the United Kingdom because the word "consider" is too subjective; how could it be determined whether a person had considered security sufficiently or not? If it is accepted that state clarification of this type of requirement is needed, it rather weakens the argument for direct applicability of the UN through the Technical Instructions.

3.3 As a further example:

"1.4.1.2 Consignors shall only offer dangerous goods to carriers that have been appropriately identified."

3.3.1 This could not be enforced as written as "appropriately identified" is not defined. Furthermore, Consignors (shippers) will not ordinarily know which carrier (operator) will be carrying their goods. Such an objective would, however, sit comfortably in Annex 17, as it would be up to states to define "appropriately identified" in transposing the Annex 17 objective into national legislation.

3.4 Finally,

"1.4.1.3 Transit sites, such as airside warehouses marshalling yards and other temporary storage areas shall be properly secured, well lit and, where possible, not be accessible to the general public."

directly conflicts with the provisions of Annex 17 which, in respect of such sites located at an airport, would not allow for access to the public to be denied only if this is possible ie it must be inaccessible to the general public.

3.4.1 Given the general nature of the UN text, it is suggested it should be regarded as guidance material rather than regulatory text and as such could quite reasonably be added to the Security Manual.

3.5 ii) *Availability*

3.5.1 The Security Manual is a "restricted" publication and so is not available for purchase in the same way as the Technical Instructions. However, it is readily supplied to those who need it subject to details of the recipient being supplied to ICAO. In any event, the advice contained in the Security Manual should be reproduced in National Aviation Security Programmes, distribution of which is a matter for states.

3.6 iii) *Schedule of amendment*

3.6.1 It is understood that any change to Annex 17 and the Security Manual would not take effect until July 2005 at the earliest but this is only 6 months later than the 2005-2006 edition of the Technical Instructions. It is suggested that given the extensive security provisions already in place for aviation, a delay of 6 months would be preferable to placing the material in an inappropriate location.

3. CONCLUSION

3.1 Looking at the intent of the UN Text, rather than the precise wording, the majority of what it intends to deliver through improved security of dangerous goods is already achieved by the implementation of existing Annex 17 standards. It is therefore recommended that regardless of which Annex is chosen as the vehicle for adoption of the UN text, only those requirements not already covered or exceeded by existing ICAO standards should be separately adopted.

3.2 Regardless of where and how the UN Text is adopted, it is essential that appropriate cross-referencing is made between Annexes 17 and 18, and that appropriate consultation continues between the respective ICAO Panels of experts to ensure compatibility of requirements.

3.3 At the information exchange meeting a compromise solution was suggested whereby the UN text would initially be adopted through Annex 18 and Technical Instructions (as this was likely to be the speedier option) with the relevant text being moved to Annex 17 at the earliest opportunity. As a compromise solution this may appear to have attractions, and it recognises Annex 17 as, ultimately, the appropriate home for the UN text. However, it has to be recognised that, once adopted in Annex 18 and the Technical Instructions, there will be a temptation to leave it there, especially given the pressure of other priorities on both the Dangerous Goods and Aviation Security Panels.

3.4 Based on the arguments outlined above, it is concluded that the most appropriate location for the UN Model regulation on the security of dangerous goods is in Annex 17 and the associated Security Manual; and that, if it is accepted in principle that this is the correct vehicle for adoption of the UN text, then every effort should be made to adopt the UN text in Annex 17 now, rather than seeking to move it from Annex 18 at a later date.

3.5 The following proposals are therefore made:

3.5.1 Changes to Annex 18 and the Technical Instructions

3.6 *Proposal 1*

3.6.1 Add a new note 5 to Chapter 2.1 in Annex 18:

"Note 5 – The detailed provisions for the security of cargo, including dangerous goods, are contained in Annex 17 and the associated Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference".

3.7 *Proposal 2*

3.7.1 Add a new Part 1; 1.6 to the Technical Instructions:

3.7.2 "1.6 Security

3.7.3 *The detailed provisions for the security of cargo, including dangerous goods, are contained in Annex 17 to the Convention on International Civil Aviation and the associated Security Manual for Safeguarding Civil Aviation against Acts of Unlawful Interference".*

4. **CHANGES TO ANNEX 17 AND THE SECURITY MANUAL FOR SAFEGUARDING CIVIL AVIATION AGAINST ACTS OF UNLAWFUL INTERFERENCE**

4.1 It is proposed to recommend the following to the AVSEC Panel:

4.2 *Proposal 3*

4.2.1 Amend the definition of cargo contained in Chapter 1 of Annex 17 to make clear that the cargo security requirements apply to all cargo intended for carriage by air:

*"Cargo. Any property **intended for carriage** on an aircraft other than mail, stores and accompanied or mishandled baggage"*

4.3 *Proposal 4*

4.3.1 Add the following definitions (as currently in Chapter 1 of Annex 18) to Chapter 1 of Annex 17:

4.3.2 ***Cargo aircraft. Any aircraft, other than a passenger aircraft, which is carrying goods or property.***

4.3.3 ***Passenger aircraft. An aircraft that carries any person other than a crew member, an operator's employee in an official capacity, an authorized representative of an appropriate national authority or a person accompanying a consignment or other cargo.***

4.4 *Proposal 5*

4.4.1 Amend 4.5.2 of Annex 17 as follows:

4.4.2 "Each Contracting State shall establish measures to ensure that:

- a) cargo (*including dangerous goods*), courier and express parcels and mail intended for carriage on passenger *aircraft flights*; *and*

- b) *dangerous goods intended for carriage on cargo aircraft* are subjected to appropriate security controls."

4.5 *Proposal 6*

4.5.1 Amend 4.5.3 of Annex 17 as follows:

4.5.2 "Each Contracting State shall establish measures to ensure that operators do not accept consignments of:

- a) cargo (*including dangerous goods*), courier and express parcels or mail for carriage on passenger aircraft flights; and
- b) *dangerous goods intended for carriage on cargo aircraft*

unless the security of such consignments is accounted for by a regulated agent or such consignments are subjected to other security controls to meet the requirements of 4.5.2."

4.6 *Proposal 7*

4.6.1 Add a new 4.5.5 to Annex 17:

"4.5.5 Each Contracting State shall establish measures to ensure that cargo that includes high consequence dangerous goods shall be transported on aircraft only where the operator adopts, implements and complies with a security plan to ensure that such goods are subject to appropriate security control."

4.7 *Proposal 8*

4.7.1 Add a new 3.5 to Annex 17:

3.5 Quality Control - Dangerous Goods Security Training

3.5.1 Each Contracting State shall ensure that individuals directly involved in the transport of dangerous goods by air who are employed as or by:

- a) shippers;
- b) operators;
- c) agencies which perform, on behalf of the operator, the act of accepting, handling, loading, unloading, transferring or other processing of dangerous goods;
- d) agencies other than operators involved in processing dangerous goods; receive dangerous goods security awareness training.

3.5.2 Dangerous goods security awareness training shall address the nature of security risks, recognising security risks, methods to address and reduce such risks and actions to be taken in the event of a security breach. It shall include awareness of security plans (if appropriate) commensurate with the responsibilities of individuals and their part in implementing security plans.

3.5.3 Such training shall be provided or verified upon employment in a position involving dangerous goods transport and shall be periodically supplemented with retraining.

3.5.4 Records of all security training undertaken shall be kept by the employer and made available to the employee if requested.

4.8 *Proposal 9*

4.8.1 Amend the 5th bullet of para 11 of Appendix 25 of the Security Manual so as to recognise the fact that dangerous goods may be carried legitimately by air:

"...certifies in writing that the consignment does not contain any explosives or any other dangerous devices or substances ***other than dangerous goods offered for carriage by air in accordance with the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air***".

4.9 *Proposal 10*

4.9.1 Add the following to the Security Manual so as to reflect 1.4.3 of the UN:

"States shall consider establishing a programme for identifying shippers or operators engaged in the transport of high consequence dangerous goods for the purpose of communicating security related information. High consequence dangerous goods are those which have the potential for mis-use in a terrorist incident and which may, as a result, produce serious consequences such as mass casualties or mass destruction. The following is a list of dangerous goods which should be regarded as being of high consequence but does not include those shipped under the Excepted Quantity provisions:

Class 1, Division 1.1 explosives

Class 1, Division 1.2 explosives

Class 1, Division 1.3 compatibility group C explosives

Class 1, Division 1.5 explosives

Division 2.3 toxic gases (excluding aerosols)

Class 3 and Division 4.1 desensitised explosives

Division 6.1 toxic substances of Packing Group I

Division 6.2 infectious substances of [Category A]

Class 7 radioactive material in activities greater than 3000 A1 (special form) or 3000 A2, as applicable, in Type B and Type C packages.

Note 1 – For purposes of non-proliferation of nuclear material the Convention on Physical Protection of Nuclear Material applies to international transport supported by IAEA INFCIRC/225(Rev.4)."

Note 2 – The Civil Aviation Security Policy Section should liaise with the Regulatory Section to establish a programme for identifying shippers or operators engaged in the transport of dangerous goods, for the purpose of communicating security related information.

5. SECURITY PLANS

5.1 Carriers, consignors and others engaged in the transport of high consequence dangerous goods by air shall adopt, implement and comply with a security plan that addresses at least the following elements:

- a) specific allocation of responsibilities for security to competent and qualified persons with appropriate authority to carry out their responsibilities;
- b) records of dangerous goods or types of dangerous goods transported;
- c) review of current operations and assessment of vulnerabilities, including inter-modal transfer, temporary transit storage, handling and distribution as appropriate;
- d) clear statements of measures, including training, policies (including response to higher threat conditions, new employee/employment verification etc.), operating practices (e.g. choice/use of routes where known, access to dangerous goods in temporary storage, proximity to vulnerable infrastructure etc.), equipment and resources that are to be used to reduce security risks;
- e) effective and up to date procedures for reporting and dealing with security threats, breaches of security or security incidents;
- f) procedures for the evaluation and testing of security plans and procedures for periodic review and update of the plans;
- g) measures to ensure the security of transport information contained in the plan; and
- h) measures to ensure that the security of the distribution of transport documentation is limited as far as possible. (such measures shall not preclude provision of transport documentation required by Chapter 5.4 of these Regulations.).

Note – Carriers, consignors and consignees should co-operate with each other and with appropriate authorities to exchange threat information, apply appropriate security measures and respond to security incidents."