



Civil Aviation Authority, Bangladesh

Air Operator Guidance on Safe Transportation of Dangerous Goods by Air

Version 1.0

1st May 2017

***CAAB HQ, Kurmitola, Dhaka 1229
Bangladesh***

FOREWARD

Bangladesh, as a signatory to the Chicago Convention is obliged to implement the Standard and Recommended Practices as laid down in the Annexes to the Chicago Convention. As part of this, CAAB is committed to ensure the safety of the aviation system while transporting the Dangerous Goods by Air outlined in the Annex 18 and ICAO TI (Doc 9284)

This Air Operator Guidance contains and outlines the regulatory requirements of CAAB regarding the safe transportation of Dangerous Goods by Air to be followed by the Commercial Air Operators, Shippers, Freight forwarders and other entities involved in the transportation of Dangerous Goods by air.

All Commercial Air Operators, Shippers, Freight forwarders and other entities involved in the transportation of Dangerous Goods by air are to follow and implement the requirements of this air operator guidance in conjunction with ICAO Technical Instructions (Doc 9284)

This will be a live document and with the pace of time, following emergences of new provisions, procedures and more advanced aviation needs, the document shall require to be amended and new inputs be incorporated.

This Air Operator Guidance is approved from the date of signing.



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Chapter-1

General

1.1 Introduction

Civil Aviation Authority, Bangladesh has adopted The ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284 AN/905) and the related amendments thereof, which are published from time to time has been incorporated by reference in Civil Aviation Rule (CAR) 1984 (Reference:- Rule 304A(2) of CAR 1984).

In addition all air operators has been intimated about the adoption of The ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284 AN/905) and the related amendments thereof, vide circular No. CAAB/52/190/09/FI/464 dated: 8/04/2009.

1.2 Applicable Annex and ICAO TI

- a) ICAO Annex 18
- b) ICAO Technical Instructions
- c) Addendum and Corrigendum published by ICAO on Annex 18 and ICAO TI

1.3 Applicability and compliance with this manual

This manual is applicable to all commercial air operators, shippers and entities involved in the process of transportation of Dangerous Goods by air and shall comply with the requirements laid down in this manual.

1.4 Dangerous Goods Points of Contact (DGPOC)

- a) All air operators and entities certified to carry dangerous goods as cargo by air shall assign a Category-6 certified personal as dangerous goods point of contact and communicate the contact details of the assigned person to CAAB.
- b) Other air operates and entities, except as mentioned in para a) above shall assign a Category-7 or 8 certified personal as dangerous goods point of contact and communicate the contact details of the assigned person to CAAB.
- c) Communicate any change in the status of the DGPOC to CAAB

1.5 Definitions

All definitions contained in the Annex 18 and the Technical Instructions (Doc 9284) shall be applicable for this manual.

Chapter- 2
Classifications & Limitations

2.1 Classification of Dangerous Goods:

The classification of an article or substance shall be in accordance with the provisions of the ICAO technical instructions and IATA DG Regulations.

2.2 Dangerous goods permitted for transport by air:

The transport of dangerous goods by air shall be forbidden except as established in this Part and the detailed specifications and procedures provided in the Technical Instructions.

2.3 Dangerous Goods in Air Mail:

In accordance with the standards of the Universal Postal Union Convention the carriage of dangerous goods in mail is forbidden except for the items specifically listed in the ICAO Technical Instructions provided they are classified, packed and marked as required by this Part.

2.4 Dangerous goods forbidden for transport by air unless exempted:

The dangerous goods described hereunder shall be forbidden on aircraft unless specified by the States concerned or unless the provisions of the Technical Instructions indicate they may be transported under an approval and/or exemption issued by the State of Origin, State of Operator, State of Over flight, Transit and Destination:

- a. Articles and substances that are identified in the Technical Instructions as being forbidden for transport in normal circumstances; and
- b. Infected live animals.

2.5 Dangerous goods forbidden for transport by air under any circumstances:

Articles and substances that are specifically identified by name or by generic description in the Technical Instructions as being forbidden for transport by air under any circumstances shall not be carried on any aircraft.

An aircraft operating to/from/through Bangladesh or overflying Dhaka Flight Information Region (FIR) shall not carry, or have loaded therein, or suspended there under, dangerous goods which, in accordance with the Technical Instructions or IATA DG Regulations, are forbidden for transport by air.

Note : The detailed definitions of the classes of dangerous goods are contained in the Technical Instructions. These classes identify the potential risks associated with the transport of dangerous goods by air and are those recommended by the United Nations Committee of Experts on the Transport of Dangerous Goods

2.6 Limitations on the transport of dangerous goods by air

2.6.1 Transportation Requirements for Dangerous Goods:

Following items are prohibited to be transported by aircraft except with prior permission from the competent authority and Civil Aviation Authority of Bangladesh in accordance with the conditions mentioned in this permission:

- Weapons and munitions,
- Poisonous Gases,
- Germs.
- Explosives, unless required on board the aircraft for its operation, or for signaling.
- Radioactive materials, radioisotopes and similar substances;
- Any other forbidden item as determined by the competent authorities,

Application for permission to transport the above item shall be submitted in writing, to the Civil Aviation Authority of Bangladesh.

An aircraft operating to/from/through Bangladesh or overflying Dhaka Flight Information Region (FIR) may not carry, or have loaded therein, or suspended there under, dangerous goods which, in accordance with the Technical Instructions or IATA DG Regulations, are forbidden for transport by air, without the written exemption issued by Civil Aviation Authority of Bangladesh (CAAB) in accordance with requirements specified in the Technical Instructions or IATA DG Regulations.

Note: Exemption granted by CAAB must accompany the relevant consignment.

2.6.2 Explosive Materials:

No person shall accept, process or transport Class 1 explosive material unless they hold a valid written permission from the Ministry of Home and/or Ministry of Defense and CAAB.

2.6.3 Radioactive Materials:

No person shall accept, process or transport Class 7 radioactive materials unless they hold a valid written permission from the Bangladesh Atomic Energy Commission and CAAB.

Chapter-3
PACKING, LABELING & MARKING

3.1. General requirements

Dangerous Goods Shall Be Packed In Accordance With The Provisions of This Section and as provided In the ICAO Technical Instructions.

3.1.1 Packaging:

- I. Packagings used for the transport of dangerous goods by air shall be of good quality and shall be constructed and securely closed so as to prevent leakage might be caused in normal conditions of transport, by changes in temperature, humidity or pressure, or by vibration.
- II. Packagings shall be suitable for the contents. Packagings in direct contact with dangerous goods shall be resistant to any chemical or other action of such goods.
- III. Packagings shall meet the material and construction specifications in the Technical Instructions.
- IV. Packagings shall be tested in accordance with the provisions of the Technical Instructions.
- V. Packaging's for which retention of a liquid is a basic function, shall be capable of withstanding, without leaking, the pressure stated in the Technical Instructions.
- VI. Inner packagings shall be as packed, secured or cushioned as to prevent their breakage or leakage and to control their movement within the outer packaging(s) during normal conditions of air transport. Cushioning and absorbent materials shall not react dangerously with the contents of the packagings.
- VII. No packaging shall be re-used until it has been inspected and found free from corrosion or other damage. Where a packaging is re-used, all necessary measures shall be taken to prevent contamination of subsequent contents.
- VIII. If, because of the nature of their former contents, uncleaned empty packagings may present a hazard, they shall be tightly closed and treated according to the hazard they constitute.
- IX. No harmful quantity of a dangerous substance shall adhere to the outside of packages.

3.1.2 Labeling and marking

- I. Each package of dangerous goods shall be labelled and marked as specified in the ICAO Technical Instructions or IATA DG Regulations with the proper shipping name of its contents and when assigned, the UN number and such other markings as may be specified in those Instructions.
- II. Specification markings on packaging. Unless otherwise provided for in the ICAO Technical Instructions or IATA DG Regulations, each packaging manufactured to a specification contained in those instructions shall be so marked in accordance with the appropriate provisions of those instructions and no packaging shall be marked with a packaging specification marking unless it meets the appropriate packaging specifications contained in those instructions.
- III. In addition to the languages required by the State of Origin and pending on the development and adoption of a more suitable form of expression for universal use, English should be used for the markings related to dangerous goods.

Note: In addition to the languages required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the markings related to dangerous goods

Chapter-4

RESPONSIBILITIES

4.1. Shippers and Freight Forwarder responsibilities:

4.1.1 The shipper, and the shipper alone, is responsible for properly preparing a shipment of dangerous goods for transport by air as he is the only person having direct knowledge of what is being shipped. All other parties subsequently involved in the shipment are reliant on information provided by the shipper. Where the shipper does not have staff trained in accordance with the Technical Instructions or IATA DG Regulations, the freight forwarder may act on the shipper's behalf to provide such technical support/advise as may be required in order to correctly and safely prepare the shipment. However, the Transport Document (TD) or Shippers Declarations for Dangerous Goods (SD) always remains the Shippers responsibility.

4.1.2 Before consigning any package of dangerous goods for carriage by air, the shipper and freight forwarder shall ensure that:

- i. The goods are correctly identified and classified. When in doubt as to the correct identification of the goods in question, the shipper should refer to the Manufacturer to obtain the necessary information - or - should seek the services of a reputable chemical laboratory for substance analysis. The latter also applies as/when a leak or spill occurs in the aircraft cargo hold, on the apron, or elsewhere on the aerodrome, of a substance of unknown and questionable composition;
- ii. The goods are not of a category whose carriage by air is forbidden by relevant provisions of the Technical Instructions or IATA DG Regulations;
- iii. The goods are packed, marked and labelled in accordance with the Technical Instructions or IATA DG Regulations and also that the packaging used is in compliance with specifications as stipulated in those documents;
- iv. The Special Provisions and the State and Operator variations applied to articles and substances as contained in the List of Dangerous Goods are appropriately administered;
- v. The package fulfils all requirements and conditions for carriage by air;
- vi. The Dangerous Goods Transport Document or Shipper's Declaration as required by of this Part, has been completed and the declaration therein has been signed by the true shipper of the goods.

4.2 Responsibilities of Ground Handling Agents

4.2.1 The Ground Handling Agency acting on behalf of the operator of an aircraft shall ensure that dangerous goods to be transported by air are:

- i. Identified, packaged, marked, labelled and documented in accordance with an appropriate acceptance checklist which shall be completed in duplicate;

- ii. Not leaking or damaged so that the contents may escape or become damaged:
 - a. Before accepting the package; and
 - b. 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.

4.2.2 The ground handling agent acting on behalf of an operator shall unload or cause to be unloaded any package or dangerous goods which appears to be leaking or damaged on or beneath an aircraft and shall ensure that other cargo or baggage loaded on or suspended beneath that aircraft is in a fit state for carriage by air and has not been contaminated.

4.2.3 The ground handling agency acting on behalf of an operator shall, after unloading, inspect for signs of damage or contamination on any part of the aircraft or any sling or other apparatus which has been used to suspend goods beneath the aircraft, in which:

- i. A unit load device containing dangerous goods was stowed; or
- ii. Any damaged or leaking package of dangerous goods was loaded, and the operator shall remove any contamination or repair any damage.

4.3 Operators' responsibilities:

4.3.1 Approval of Operators for the Carriage of Dangerous Goods by Air:

An Operator intending to transport dangerous goods by air must first obtain necessary approvals from the Civil Aviation Authority of Bangladesh.

Approval for transport of dangerous goods by air is granted to an Operator under the provisions contained in ICAO Annex 18 - The Safe Transport of Dangerous Goods by Air, the ICAO Technical Instructions, and this Part.

Dangerous goods must not be carried in an aircraft cabin occupied by passengers or on a flight deck of an aircraft except in circumstances permitted by the provision of the Technical Instructions and/or the IATA DG Regulations.

The Technical Instructions provide internationally agreed standards, practices and procedures on the preparation, handling and storage of dangerous goods, so they can be safely transported by air. If a dangerous goods shipment does not fully meet all the applicable requirements in the Technical Instructions as published in the IATA DG Regulations, it can present a risk to the safety of the aircraft, passengers, crew and ground staff. It is a criminal offence to accept dangerous goods for carriage by air without the appropriate approval.

4.3.2 Application by an Operator for the Carriage of Dangerous Goods:

An Operator may apply for the Carriage of Dangerous Goods by Air to the Civil Aviation Authority of Bangladesh.

The Operator is required to demonstrate compliance with the requirements of this Part, the

Technical Instructions or the IATA DG Regulations, including the training of personnel.

The operator is also required to appoint a Dangerous Goods Coordinator who will be responsible to oversee the operator's compliance with this Part and will act as focal point of communication for the CAAB on all Dangerous Goods matters. He is obliged to report any non-compliance, accident, incident or occurrences to the CAAB.

When satisfied, CAAB may grant an approval to an Operator to carry Dangerous Goods by Air for a specified period of maximum 12 months, for certain flights, or on a case by case basis. In case the Operator does not comply with the Dangerous Goods requirements, CAAB shall refuse, suspend or revoke such approval.

4.3.3 Acceptance for Transport

The operator must ensure that all relevant documents accompanying the dangerous goods must be duly completed and certified unless the Technical Instructions or IATA DG Regulations indicate that such document is not required.

The operator must ensure that the package, over pack or freight containers containing dangerous goods must be inspected in accordance with the acceptance procedures in the Technical Instructions.

4.3.4 Acceptance Checklist

To comply with the requirements, operators and handling agencies are to ensure that acceptance checklist is available and complied with. Acceptance Checklist must be signed by the acceptance staff for easy identification.

4.3.5 Loading and Stowage

Packages and over packs containing dangerous goods and freight containers containing radioactive materials must be loaded and stowed on aircraft in accordance with the provisions of the Technical Instructions or the IATA DG Regulations.

4.3.6 Inspection for damage or leakage:

Packages or over packs containing dangerous goods and freight containers containing radioactive materials shall be inspected for evidence of damage or leakage before loading on an aircraft or into a Unit Load Device (ULD). Leaking or damaged packages, overpacks or freight containers shall not be loaded on aircraft.

A ULD shall not be loaded aboard an aircraft unless the device has been inspected and found free from any evidence of leakage from, or damage to, any dangerous goods contained therein.

Where any package of dangerous goods loaded on an aircraft appears to be damaged or leaking, the operator shall remove such package from the aircraft, or arrange for its removal by an appropriate authority or organization, and thereafter shall ensure that the remainder of the consignment is in a proper condition for transport by air and that no other package has been contaminated.

Packages or overpacks containing dangerous goods and freight containers containing radioactive materials shall be inspected for signs of damage or leakage upon unloading from the aircraft or unit load device. If evidence of damage or leakage is found, the area where the dangerous goods or unit load device were stored on the aircraft shall be inspected for damage or contamination.

4.3.7 Separation and Segregation

Packages containing dangerous goods which might react with one another shall not be stowed on an aircraft next to each other or in a position that would allow interaction between them in the event of leakage.

Packages and infectious substances shall be stowed on an aircraft in accordance with the provisions of the Technical Instructions or the IATA DG Regulations.

Packages of radioactive materials shall be stowed on an aircraft so that they are separated from persons, live animals and undeveloped film in accordance with the provisions in the Technical Instructions or the IATA DG Regulations.

Packages of toxic and infectious substances shall be stowed on an aircraft in accordance with the provisions of the Technical Instructions or the IATA DG Regulations.

Packages of radioactive materials shall be stowed on an aircraft so that they are separated from persons, live animals and undeveloped film, in accordance with the provisions in the Technical Instructions or the IATA DG Regulations.

4.3.8 Securing of Dangerous Goods Cargo Loads

When dangerous goods subject to the provisions contained herein are loaded in an aircraft, the operator shall protect the dangerous goods from being damaged, or shall secure such goods in the aircraft in such a manner that will prevent any movement in flight which would change the orientation of the packages

For packages containing radioactive materials, the securing shall be adequate to ensure that the segregation requirements are met at all times.

4.3.9 Loading on Cargo Aircraft

Except as otherwise provided in the Technical Instructions or published in the IATA DG Regulations, packages of dangerous goods bearing the "Cargo Aircraft only" label shall be loaded in such manner that a crew member or other authorized person can see, handle and, where size and weight permit, separate such packages from other cargo in flight.

4.3.10 Carriage of Dangerous Goods when Overflying Bangladesh

An Operator planning to carry Dangerous Goods and applying for permission to overfly the Dhaka Flight Information Region (FIR), must ensure that all dangerous goods have been packed, marked, labeled, and handled in accordance with ICAO Annex 18 – Safe Transport of Dangerous Goods by Air, and the requirements of ICAO Doc. 9284-AN/905, and must make a statement to the CAAB to this effect. This statement must be made at the time of providing: **notification overflying/applying for the required permission.**

4.3.11 Transportation of Arms, Ammunition and all Classes of Explosives

The transportation of arms of war, ammunition and all classes of explosives from/ to/ through Bangladesh requires prior permission to be obtained from the Ministry of Defense and CAAB.

Requests for carriage of the above types of dangerous goods may be considered for approval by the CAAB when:

- i. The Ministry of defense has no objections; and
- ii. The goods are transported in accordance with Technical Instructions and the IATA DG Regulations.

4.3.12 Removal of contamination

- i. Any hazardous contamination found on an aircraft as a result of leakage or damage to dangerous goods shall be removed without delay; and
- ii. An aircraft which has been contaminated by radioactive materials shall immediately be taken out of service and not returned to service until the radiation level at any accessible surface and the non-fixed contamination is not more than the values specified in the technical instructions.

4.3.13 Personal Responsibility

No person shall accept and process dangerous goods for transport by air unless that person has been trained and the goods are properly identified, packaged, marked, labelled, and documented and he/she shall not: -

- i. Take or cause to be taken on board;
- ii. Suspend or cause to be suspended beneath; or
- iii. Deliver or cause to be delivered for loading on, or suspension beneath, an aircraft Any dangerous goods which he/she knows, or ought to know, or suspect to be, goods capable of posing significant risk to health, safety, or property unless the Technical Instructions or IATA DG Regulations have been complied with and the shipment of those goods is safe for transport by air.

4.3.14 Provisions of information

i. Information to pilot-in-command NOTOC

The operator of an aircraft in which dangerous goods are to be carried shall provide the pilot-in-command as early as practicable before departure of the aircraft with written information as specified in the Technical Instructions or in the IATA DG Regulations.

NOTOC must be retained on the ground and readily available & accessible to the aerodromes of last departure and next schedule arrival for each flights on which dangerous goods are carried.

ii. Information and instructions to flight crew members

The operator shall provide such information in the Operations Manual or any other manual as will enable the flight crew to carry out its responsibilities with regard to the transport of dangerous goods and shall provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

iii. Information to passengers

The operator will ensure that information is promulgated in such a manner that passengers are warned as to the types of dangerous goods which they are forbidden from transporting aboard an aircraft as provided for in the Technical Instructions or in the IATA DG Regulations.

iv. Information to other persons

Operators, shippers or other organizations involved in the transport of dangerous goods by air shall provide such information to their personnel as will enable them to carry out their responsibilities with regard to the transport of dangerous goods and shall provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

v. Emergency Response Information

The operator must ensure that for consignments for which a dangerous goods transport document is required by this Part, appropriate information is immediately available at all times for emergency responds to accidents and incidents involving dangerous goods in air transport. The information must be available to the pilot in command and can be provided by:

- a. The ICAO document "Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods" (Doc.9481); or
- b. Any other document which provides similar information concerning the dangerous goods on board.

vi. Information at Cargo Acceptance Areas

An operator or the operator's handling agent must ensure that sufficient notices, prominently displayed are provided at cargo acceptance points, giving information about the transport of dangerous goods.

vii. Information from commander to ATC and/or aerodrome authorities

If an in-flight emergency occurs, the pilot-in-command shall, as soon as the situation permits, inform the appropriate air traffic services unit, for the information of aerodrome authorities, of any dangerous goods on board the aircraft. Whenever possible this information should include the proper shipping name and/or UN number, the class/division and for Class 1 the compatibility group, any identified subsidiary risk(s), the quantity and the location on board of the aircraft. When it is not considered possible to include all the information, those parts thought most relevant in the circumstances should be given.

viii. Information in the event of an aircraft accident or incident In the event of :

- a) An aircraft accident or
- b) A incident where dangerous goods carried as cargo may be involved,

the operator of the aircraft carrying dangerous goods as cargo shall provide information, without delay, to emergency services responding to the accident or serious incident about the dangerous goods on board, as shown on the written information to the pilot-in-command. As soon as possible, the operator shall also provide this information to the appropriate authorities of the State of the Operator and the State in which the accident or serious incident occurred. In the event of an aircraft incident, the operator of an aircraft carrying dangerous goods as cargo shall, if requested to do so, provide information without delay to emergency services responding to the incident and to the appropriate authority of the State in which the incident occurred, about the dangerous goods on board, as shown on the written information to the pilot-in-command.

Note: The terms "accident" and "incident" are as defined in Para 6.2.1.

ix. **The Dangerous Goods Transport Document (TD) or Shippers Declaration (SD)**

An aircraft shall not carry dangerous goods unless the shipper of the goods has furnished the operator of the aircraft, with a TD or SD except that such document shall not be required in respect of those categories of dangerous goods specified in the Technical Instructions or IATA DG Regulations as being goods for which such document is not required.

The TD or SD shall be completed and signed only by the actual shipper of the goods and it shall:

- a. Describe the dangerous goods in accordance with, and contain such information as is required by, the provisions of the Technical Instructions or IATA DG Regulations; and
- b. Contain declaration stating that the dangerous goods are: fully and accurately described by their proper shipping name;
 - Correctly classified, packaged, marked and labelled; and
 - In all respects to proper condition for carriage by air according to applicable international and national governmental regulations.

The TD or SD shall be completed and signed in duplicate by the shipper (the second copy may be a carbon copy). One copy of the document will be attached to the Airwaybill and the second copy (or carbon copy) shall be retained on file by the operator or the ground handling service acting on his behalf for a minimum of three months, together with any other document in respect of dangerous goods furnished him in accordance with these Regulations (as a minimum: the acceptance checklist and a copy of the written information [NOTOC] provided by the pilot-in-command and which has been receipt-acknowledged with his signature).

Note: In addition to information specified by the Technical Instructions/IATA DG Regulations as required for inclusion on the TD or SD, the emergency response (24 hour) telephone numbers for consignor and consignee shall also be included in the entries identifying each.

- x. **Preservation of documents related to transport of dangerous goods:**
 1. NOTOC must be preserved for three (03) months.
 2. Shippers' declaration form and any other transport documents such as letter of exemption and letter of approval must be preserved for three (03) months.
 3. Training records must be preserved for thirty six (36) months.

Chapter- 5

Training

5.1. General

5.1.1 All operators and agencies obliged to follow the regulations concerning the transport of dangerous goods shall provide initial and recurrent training to all employees mentioned in this Part.

5.1.2 **Staff of operators not carrying dangerous goods as cargo** or mail must be trained commensurate with their responsibilities as indicated in ICAO TI.

5.1.3 Training must be provided and verified upon the employment of personnel identified in the applicable categories specified in the ICAO Technical Instructions before this personnel is asked to start his/her duty in that function.

5.1.4 Recurrent training must take place within **24 months** of previous training. However, if recurrent training is completed within the final three months of validity of previous training, the period of validity extends from the month on which the recurrent training was completed until 24 months from the expiry month of that previous training.

5.1.5 Training curricula must be in line with the ICAO Technical Instructions and it has to be approved by CAAB.

5.1.6 No person/organization may conduct a certified DGR Training without, or in violation of, Training Approval issued by CAAB.

5.2 Establishment of Training Programmes

Dangerous goods training programmes shall be established and updated as provided for in the Technical Instructions.

The shippers and packers of dangerous goods by air or the freight forwarder acting on his behalf, the aircraft operator and ground handling service acting on his behalf, agencies engaged in the security screening of passengers and their baggage and cargo, shall provide training for any of their respective employees whose duties include a function concerned with the carriage of passengers or cargo by air, of the provisions of the Technical Instructions or IATA DG Regulations.

5.3 Training Curricula

The shippers and packers of dangerous goods by air, the aircraft operator and ground handling service acting on his behalf, agencies engaged in the security screening of passengers and their baggage and cargo shall establish and undertake training programmes as required and outlined in table 1-4 and 1-5 of the Technical Instructions or Section 1.5 of the IATA DG

Regulations as pertain to various categories of personnel. Such training must include:

- a) **General familiarization training** — which must be aimed at providing familiarity with the general provisions;
- b) **Function-specific training** — which must provide detailed training in the requirements applicable to the function for which that person is responsible; and
- c) **Safety training** — which must cover the hazards presented by dangerous goods, safe handling and emergency response procedures

Dangerous Goods training programmes conducted in or outside Bangladesh for Operator's personnel and the instructors conducting such programmes may be subject to examination and approval by the CAAB.

The current records/certificates of staff/employees for whom training is required shall be maintained on file and be readily available for inspection as/when required by a CAAB Inspector.

A test to verify understanding must be provided following training. Confirmation that the test has been completed satisfactorily is required.

5.4 Duration of Training

The minimum duration of the training courses for various categories of personnel is given below:-

| Sl. No. | Description of personal to be trained | Total duration |
|---------|--|---|
| A | Shippers and Persons taking the Responsibility of Shipper (category-1) | 40Hours for Initial 20 Hours for Recurrent |
| | Staff of Freight Forwarders involved in processing of Dangerous Goods. (category-3) | |
| | Operators and Grounding Agent's Staff Accepting dangerous Goods. (category-6) | |
| B | Packers (Category-2) | 16 Hours for Initial 8 Hours for Recurrent |
| | Staff of Freight Forwarders involved in Processing of Cargo, Mail or Stores (other than Dangerous Goods) (Category-4) | |
| | Staff of Freight Forwarders involved in Processing of Cargo, Mail or Stores (Category-5) | |
| | Operators and Ground handling agent's staff involved in Processing Cargo, Mail or Stores (other than Dangerous Goods) (Category-7) | |
| | Operators and Ground handling agent's staff involved in Processing Cargo, Mail, Stores and Baggage(Category-8) | |
| C | Passenger Handling Staff (Category-9) | 16 Hours for Initial 8 Hours for Recurrent |
| | Flight Crew Member and Load Planners(Category-10) | |
| | Crew Members (other than Flight Crew Members)(Category-11) | |
| | Security Staff involved with Screening of passenger, their baggage and Cargo, Mail and Stores(Category-12) | |
| D | Operator's and ground handling agent's staff accepting cargo or mail (other than dangerous goods) (Category-13) | 16 Hours for Initial 8 Hours for |
| | Operator's and ground handling agent's staff involved in the handling, | |

| | |
|---|-----------|
| storage and loading of cargo or mail (other than dangerous goods) and baggage (Category-14) | Recurrent |
| Passenger handling staff(Category-15) | |
| Flight crew members, loadmasters, load planners and flight operations officers/flight dispatchers (Category-16) | |
| Crew members (other than flight crew members)(Category-17) | |

Note: Serial No. A, B & C are applicable for Operators who are certified to carry Dangerous Goods as Cargo and serial No. D is applicable for Operators who are not certified to carry Dangerous Goods as Cargo.

5.5 Training Record

A record of training must be maintained which must include:

1. the individual's name;
2. the most recent training completion month;
3. a description, copy or reference to training materials used to meet the training requirements;
4. the name and address of the organization providing the training; and
5. Evidence which shows that a test has been completed satisfactorily.

Training records must be retained by the employer for a minimum period of **36 months** from the most recent training completion month and must be made available upon request to the employee or CAAB.

5.6 Training Facilities

Training facilities shall be adequate to ensure that training objectives can be achieved. Facilities shall be:

1. Quiet and free of distractions,
2. Suitably lighted for the type of instructions to be given, e.g. lectures,
3. Slides and audio-visual furnished with sufficient desks,
4. Chairs, chalk/white boards, and other appropriate equipment; and equipped with training aids such as films, systems components, audio-visual, current IATA DG Regulations Manual, and other documents related to Dangerous Goods Regulations Course.
5. Placards: ICAO/IATA Hazard and Handling Label.

5.7 Instructor's Requirements

5.7.1 Instructor's Qualification:

Unless otherwise provided for by CAAB, instructors of initial and recurrent dangerous goods training programmes must have adequate instructional skills and have successfully completed a dangerous goods training programme in the applicable category, or Category 6, prior to delivering such a dangerous goods training programme.

5.7.2 Instructor Approval:

In order to receive CAAB approval for the instructor to conduct the DGR Course, the applicant

shall submit all relevant documents showing his/her qualification and experience to the CAAB for evaluation.

After evaluation of the documents submitted, CAAB will issue an initial approval to the applicant for conducting 2 DGR courses under the supervision of CAAB authorized instructor and observation of a CAAB Inspector. Upon completion of the courses, CAAB Authorized Instructor shall submit an evaluation report of the applicant to the CAAB. Based on the evaluation report, and if found satisfactory, CAAB will issue a final approval for the applicant valid for 24 months.

5.7.3 Instructor Renewal

Instructors delivering initial and recurrent dangerous goods training programmes must at least every 24 months deliver such a course and have attend successfully recurrent training on applicable category.

Note: CAAB may suspend, revoke or cancel, the Instructor's approval if found violating the standards or requirement of ICAO Annex-18, ICAO TI or this Part.

5.7.4 Approval Requirements

In order to obtain approval from CAAB to conduct DGR Course, the organization shall: -

- I. Submit an application mentioning the Qualifications and experience of instructors to be used.
- II. Training Programme Curriculum with lesson plan,
- III. Questions to be used in final tests,
- IV. Training Programmes to be conducted.

After evaluation of the above documents, CAAB will conduct an initial evaluation on the facilities. If found satisfactory, CAAB will issue an initial approval for the organization to conduct the DGR Course; The final approval certificate valid for two years will be issued after CAAB evaluates 1 to 3 courses, conducted by the organization.

Civil Aviation Authority of Bangladesh reserves the right to inspect the organization at any time of the year during the validity of the approval. The inspections could be scheduled or non-scheduled without prior notification. In case of any non-compliance with this Part found during the inspection, CAAB reserves the right to suspend, revoke or cancel the approval.

Chapter- 6

Dangerous Goods Accident and Incident Reporting

6.1 Special Notification Requirements

Special Notification Requirements in the Event of an Accident or Occurrence When Dangerous Goods are Being Carried or Have Been Offered for Air Transport without Having Been Prepared and Declared in Accordance with the ICAO Technical Instructions.

6.2 Information to be provided by the Pilot-in-Command in the Event of an In-Flight Emergency

If an in-flight emergency occurs and the situation permits, the commander must inform the appropriate Air Traffic Services Unit of any dangerous goods on board. This information should include the proper shipping name, class/division, identified subsidiary risk(s), compatibility group for explosives, quantity and location on board.

Note: If it is the operator's policy to provide flight crew with a telephone number where detailed information on dangerous goods on board may be obtained (on the NOTOC) this procedure should be explained.

6.3 Information to be provided by the Operator in the Event of an Aircraft Accident or Serious Incident Where Dangerous Goods Carried as Cargo may be Involved

If an aircraft carrying dangerous goods as cargo is involved in an accident or serious incident where the dangerous goods may be involved, the operator must provide information, without delay, to emergency services responding to the accident or serious incident about the dangerous goods on board, as shown on the copy of the information to the pilot-in-command (NOTOC). The information must be sufficient to enable any hazards created by the dangerous goods to be minimised and include the proper shipping name, UN number, class/division, any identified subsidiary risks, the compatibility group for explosives, the quantity and the location on board the aircraft. As soon as possible, the operator must also provide this information to the CAAB Flight Safety & Regulations Division- Dangerous Goods Office and the appropriate authority of the State in which the accident or serious incident occurred..

6.4 Information to be provided by the Operator in the Event of an Aircraft Incident

In the event of an aircraft incident, the operator of an aircraft carrying dangerous goods as cargo must, if requested to do so, provide information without delay to the emergency services responding to the incident and to the appropriate authority of the State in which the incident

occurred, about the dangerous goods on board, as shown on the copy of the information to the pilot-in-command (NOTOC).

6.5 Dangerous Goods Accident and Incident Reports

6.5.1. Definitions:

i) Dangerous goods accident: An occurrence associated with and related to the transport of dangerous goods by air which results in fatal or serious injury to a person or major property or environmental damage.

ii) Dangerous goods incident: An occurrence other than a dangerous goods accident associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, property or environmental damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardizes an aircraft or its occupants is also deemed to be a dangerous goods incident.

Note: A dangerous goods accident or incident may also constitute an aircraft accident or incident as specified in ICAO Annex 13 — Aircraft Accident and Incident Investigation.

6.5.2. An operator must report dangerous goods accidents and incidents to the appropriate authorities of the State of the Operator and the State in which the accident or incident occurred in accordance with the reporting requirements of those appropriate authorities.

Note. — This includes incidents involving dangerous goods that are not subject to all or part of the ICAO Technical Instructions through the application of an exception or of a special provision (e.g. an incident involving the short circuiting of a dry cell battery that is required to meet short-circuit prevention conditions in a special provision of 3;3).

6.5.3 An operator must report to the State of the Operator and the State of Origin any occasion when:

- a) Dangerous goods are discovered to have been carried when not correctly loaded, segregated, separated or secured.
- b) Dangerous goods are discovered to have been carried without information having been provided to the pilot-in-command (when required) or the information is inadequate.

6.5.4. An operator must report any occasion when undeclared or misdeclared dangerous goods are discovered in cargo or mail. Such a report must be made to CAAB and the State in which this occurred.

6.5.5. An operator must report any occasion when dangerous goods that are not permitted are discovered by the operator (or the operator is advised by the entity that discovers the dangerous goods) either in the baggage or on the person of passengers (after check-in) or crew members. Such a report must be made to the appropriate authority of the State in which this occurred.

6.5.6. In addition to the requirements of the ICAO Technical Instructions for the reporting of dangerous goods occurrences (above), it also requires that **any incident** which endangers or which, if not corrected, would endanger an aircraft, its occupants or any other person is reported to **CAAB**. Dangerous goods occurrences reportable under the Mandatory Occurrence Reporting Scheme include:

- Dangerous goods found not to have been secured to prevent movement.
- Damage to packages of dangerous goods.
- NOTOC errors where dangerous goods have not been stowed in accordance with loading instructions.
- Failure to prepare electric wheelchairs in order to prevent accidental activation.
- Electric wheelchairs found not to have been stowed and secured correctly.
- Leakage of dangerous goods from passenger baggage.

NOTE: Dangerous goods occurrences meeting the criteria of Para 6.2.6 also meet the definition of a dangerous goods accident or incident (above), reportable in accordance with Para 6.2.2-6.2.5. Accordingly, the report must be made to CAAB within 72 hours, unless exceptional circumstances prevent this. If necessary, a subsequent report shall be made as soon as possible giving all the details that were not known at the time the first report was sent. If a report has been made verbally, written confirmation shall be sent as soon as possible. Any type of accident or incident must be reported irrespective of whether the dangerous goods are in cargo, mail, stores, passengers' baggage or crew baggage.

The first and any subsequent report shall be as precise as possible and contain such of the following data that are relevant:

- Date of the incident or accident or the finding of undeclared or misdeclared dangerous goods.
- Location, the flight number and flight date.
- Description of the goods and the reference number of the air waybill, pouch, baggage tag, ticket, etc.
- Proper shipping name (including the technical name, if appropriate) and UN/ID number, when known.
- Class or division and any subsidiary risk.
- Type of packaging, and the packaging specification marking on it.

- Quantity of dangerous goods.
- Name and address of the shipper, passenger, etc.
- Any other relevant details.
- Suspected cause of the incident or accident.
- Action taken.
- Any other reporting action taken.
- Name, title, address and telephone number of the person making the report.

Copies of relevant documents and any photographs taken should be attached to a report.

NOTE: IF SAFE TO DO SO, THE DANGEROUS GOODS INVOLVED IN THE ACCIDENT OR INCIDENT SHOULD BE HELD PENDING CAAB INVESTIGATION.

6.6 Removal of Contamination

In the event of a spillage or leakage of dangerous goods within an aircraft, the position where the dangerous goods or ULD was stowed on the aircraft must be inspected for damage or contamination and any hazardous contamination removed. The hazard of the dangerous goods within packages concerned may be established by checking the entry on the NOTOC for that loading position or from hazard labels applied to the packages. The hazard classes and divisions of dangerous goods within a ULD may also be identified from the NOTOC or otherwise, should package labels not be visible, from the ULD tag bearing red hatchings applied to the outside of the ULD. Persons responding in the event of damage to or leakage of dangerous goods from packages must:

- identify the hazards and wear appropriate protective clothing;
- avoid handling the package or keep handling to a minimum;
- inspect adjacent packages for contamination and put aside any that may have been contaminated;
- arrange for decontamination of the aircraft and equipment; and
- in the case of infectious material, inform the appropriate public health authority or veterinary authority, and provide information to any other countries of transit where persons may have been exposed to danger; and notify the shipper and/or the consignee.

If it is evident that a package containing radioactive material is damaged or leaking, or if it is suspected that the package may have leaked or been damaged, access to the package must be restricted and a qualified person must, as soon as possible, assess the extent of contamination and the resultant radiation level of the package. The scope of the assessment must include the package, the aircraft, the adjacent loading and unloading areas and, if necessary, all other material which has been carried in the aircraft. When necessary, additional steps for the protection of persons, property and the environment must be taken in accordance with provisions established by the relevant competent authority, to overcome and minimize the consequences of such

leakage or damage. An aeroplane which has been contaminated by radioactive materials must be immediately taken out of service and not returned until the radiation level at any accessible surface and the non-fixed contamination are not more than the values specified in the Technical Instructions. In the event of non-compliance with any limit in the Technical Instructions applicable to radiation level or contamination, the operator must ensure the shipper is informed if the non-compliance is identified during transport; take immediate steps to mitigate the consequences of the non-compliance; and communicate the non-compliance to the shipper and relevant competent Authority(ies), respectively, as soon as practicable and immediately whenever an emergency situation has developed or is developing.

Chapter- 7

Dangerous Goods Manual

7.1 Regulatory Requirements

7.1.1 Pursuant to Rule 304A (2) of Civil Aviation Rule 1984 Chairman, Civil Aviation Authority, Bangladesh shall take the necessary measures to achieve compliance with the detailed provisions contained in the technical instructions, and shall also take the necessary measures to achieve compliance with any amendment to the Technical Instructions which may be published during the specified period of applicability of an edition of the Technical Instructions.

7.1.2. According to ICAO Technical Instructions on Safe Transportation of Dangerous Goods by Air, an operator must provide such information in the operations manual and/or other appropriate manuals as will enable flight crews and other employees to carry out their responsibilities with regard to the transport of dangerous goods.

7.1.3. As such, operators as identified in para 4, must have an appropriate manual to provide necessary information to her employees regarding all aspects of safe transportation of Dangerous Goods by Air.

7.2. PURPOSE OF THE DANGEROUS GOODS MANUAL.

7.2.1 The importance of providing these instructions to employees in a manual which is accessible to those employees cannot be overstated. Other readily available manuals, such as the IATA Dangerous Goods Regulations, contain all of the technical detail associated with the consignment and carriage of dangerous goods. Employees of operators handling or involved in handling dangerous goods need to be aware of the technical information contained in that document. The relevant technical information in the IATA document is delivered normally through dangerous goods training. Notwithstanding, employees may need to refer to the IATA document in the course of their duties and it should be accessible for easy reference. However, it is the practical application of that information to the particular operator's operation and policy on carriage of dangerous goods which needs to be covered in the dangerous goods manual.

7.2.2 The manual should provide employees with the necessary instructions and information which enables them to perform safely the task of handling and carrying dangerous goods for the operator. An operator who believes that the purpose of the manual is just to fulfill a regulatory requirement is unlikely to produce a set of instructions to employees which will satisfy CAAB that the manual is adequate.

7.2.3 Conversely, an operator who recognizes that the carriage of dangerous goods on the operator's aircraft, especially where it may be undeclared dangerous goods, has the potential to cause a serious incident or accident, is likely to produce a dangerous goods manual which provides information and instructions to employees to minimize that risk. The operator should identify particular areas of risk based on the operator's experience as well as local knowledge of potential shippers and what they may offer for carriage. This manual should, where relevant and appropriate, relate the technical issues to the operator's operations. In the manual, the operator should also allocate responsibilities to employees occupying certain positions in the operation to carry out the functions and duties essential to the safe handling of cargo and dangerous goods.

7.3. WHO IS REQUIRED TO HAVE A DANGEROUS GOODS MANUAL?

7.3.1 You are required to have a dangerous goods manual if you are a commercial operator carrying dangerous goods:

- (a) as consigned freight; or
- (b) in passenger's checked or carry-on baggage; or
- (c) which belong to the operator and are being returned after replacement or carried for the purposes of replacing those dangerous goods which are required to be on board the operator's aircraft for airworthiness or operational reasons (eg aircraft batteries, fire extinguishers, life rafts/vests etc); or
- (d) intended to provide during flight:
 - (i) medical aid to a patient;
 - (ii) veterinary aid or a humane killer for an animal;
 - (iii) aid in connection with a search and rescue operation; or
- (e) for dropping in connection with forestry, horticultural or pollution control activities.

7.3.2 A foreign commercial operator should maintain a Dangerous Goods Manual in accordance with the requirements of the State in which the operator's aircraft is registered, or, if that State has no such law, in accordance with the requirements of the Technical Instructions.

7.4. WHAT INFORMATION SHOULD BE INCLUDED IN DANGEROUS GOODS MANUAL?

7.4.1 The operator's policy on carriage of dangerous goods will determine the extent and nature of instructions which the operator is required to issue to employees in the dangerous goods manual. For example, an operator who carries only those dangerous goods permitted by the regulations to be carried in passengers' checked or carry-on baggage need only include in the manual relevant instructions to those employees responsible for activities associated with handling passengers' baggage.

In those circumstances, the dangerous goods manual would also not need to be distributed more widely than to the employees to whom the instructions apply.

7.4.2 Where an operator chooses to carry all dangerous goods permitted by the regulations, more detailed instructions to employees would be appropriate.

7.4.3 An operator need not include in the dangerous goods manual the technical detail which may be found in another manual such as the IATA Dangerous Goods Regulations. However, where instructions to employees in a dangerous goods manual refer to a particular Table or Section of another manual, then the manual referred to, or the relevant part of it, must also be made available, in an accessible location, to the employees responsible for compliance with the instructions.

7.4.4 An outline of the subject matter which, as a minimum, an operator should consider including in the manual for instructions to employees is as follows. The detail which may be included in relation to each item, or whether any particular item needs to be included at all, depends upon the operator's policy in relation to carriage of dangerous goods.

- **References**

- A list of the technical documents referred to in the manual and their location.

- **Company policy statement**

- The requirement for employees to comply with the instructions contained in the manual.
- Instructions to employees covering the dangerous goods which may be carried on the operator's aircraft including where applicable:
 - ◊ dangerous goods not to be carried;
 - ◊ dangerous goods of the operator;
 - ◊ dangerous goods carried on special operations (e.g., SAR, air ambulance etc).
- Operator variations.
- CAAB permissions related to the carriage of dangerous goods.
- Identity of employees authorized to accept cargo/dangerous goods, and to approve carriage of passenger/crew dangerous goods that require operator approval for carriage (may be expressed by name or title). Where this responsibility is contracted to a ground handling agent, a reference to that arrangement should be made.
- Responsibilities for keeping the dangerous goods manual fully amended and up to date.

• **Procedures for handling dangerous goods**

- Acceptance procedures.
- The operator's dangerous goods acceptance check list.
- Storage and segregation before loading.
- Aircraft loading procedures to ensure that "cargo aircraft only" packages are not loaded onto passenger aircraft.
- Retention of dangerous goods documentation.
- For dangerous goods carried on aircraft engaged in special operations such as SAR, air ambulance, forestry, horticultural or pollution control or where a humane killer for an animal is carried:
 - ◊ stowage, handling and use on the aircraft in flight.
 - ◊ actions to be taken in the event of accidental activation or spills of the dangerous goods on the aircraft in flight.

• **Dangerous goods carried by passengers and crew**

- Dangerous goods which passengers are permitted to carry on board on their person or in their checked or carry-on baggage, including the procedures and responsibilities for obtaining and granting operator approval for those items that may only be carried with the approval of the operator.
- Provision of information to passengers at passenger check-in points and ticketing areas.
- Screening of passenger's carry-on baggage for dangerous goods in conjunction with the security screening check where the operator is also the Screening Authority.
 - Disposal of dangerous goods surrendered by passengers at security screening (where the operator is the Screening Authority) and in flight.

• **Instructions related to company aircraft**

- Aircraft hold diagrams and numbering system.
- the maximum quantity of dry ice permitted in each compartment; and
- if radioactive material is to be carried, instructions on the loading of such dangerous goods based on the requirements
- Stowage and segregation after loading.
- Specific instructions relating to stowage of radioactive materials, (transport index limits) dry ice and magnetized material on the operator's aircraft.

• **Procedures for reporting dangerous goods incidents**

- Definition of a dangerous goods incident.
- Responsibilities of individual employees to report.
- Initial action.
- Follow-up action.

• **Precautions against hidden hazards in cargo consignments and passenger's baggage**

- Common misdeclared items (may be based on experience).
- Requirements for a consignor of cargo to make a signed statement of contents of the cargo and the document on which the statement should be made may not be applicable to foreign operators carrying cargo originating outside Bangladesh).
- Procedures for ensuring that the statement of contents from the consignor (original consignor or a freight forwarder) is received before the cargo is loaded onto the operator's aircraft.
- Provision of information to shippers and freight forwarders in areas where cargo is lodged with the operator.

• **Dangerous goods training**

- Regulatory training requirements.
- Training Plan and Syllabus
- Instructor Qualification.
- Responsibilities for conduct of training and
- Maintenance of dangerous goods training records.

Note: Operators will take steps to ensure employees are made aware of the content of the operator's dangerous goods manual relevant to their duties before the employee first performs the duties.

• **Information to Pilot-in-Command**

- Method of providing written advice to pilot in command of dangerous goods on board the aircraft.
- Responsibilities of pilot-in-command to acknowledge the advice.
- Method of providing emergency response information to pilot in command.

- Instructions to pilot in command to report to ATS details of dangerous goods carried in the event of an in-flight emergency.
- **Emergency procedures**
- Actions to be taken by employees in the event of an incident, such as a spillage or leakage, on the ground or in-flight. (For convenience and practicality it may be more beneficial to place this information in a document that deals specifically with emergencies, such as a Flight Crew Emergency Procedures checklist)

7.5 WHERE SHOULD THE DANGEROUS GOODS MANUAL BE KEPT?

An operator may include the dangerous goods manual with the company operations manual or alternatively, provide a separate manual. If it is decided to include the dangerous goods manual in the operations manual it is recommended that it be placed in an easily identified segment so that it may be readily located.

7.6 TO WHOM SHOULD THE INFORMATION IN THE DANGEROUS GOODS MANUAL BE AVAILABLE?

Information contained in the dangerous goods manual should be readily accessible to all relevant company employees, including any ground handling agent who is acting for or on behalf of the operator.

CHAPTER-8

Procedure for Granting Exemptions

8.1 General.

Pursuant to Rule 340B (2) of the Civil Aviation Rule 1984, Chairman may grant an exemption from complying the requirements of ICAO technical Instructions for Safe Transportation of Dangerous Goods by Air provided that:

“there is extreme emergency such as national or international crisis or natural calamities or otherwise necessitating transportation by air of such goods and full compliance with the requirements specified in the Technical Instructions may adversely affect the public interest.”

8.2 Purpose

This procedure is to advise the industry of the conditions under which the Chairman, Civil Aviation Authority of Bangladesh considers an exemption for the carriage of dangerous goods which are forbidden for transportation by air.

8.3 Applicability

This procedure applies to shippers and operators involved in the transportation of dangerous goods into and out of Bangladesh seeking an exemption to transport dangerous goods which are forbidden for transport by air.

8.4 REFERENCES. ICAO Technical Instructions (ICAO TI) for the Safe Transport of Dangerous Goods by Air (including its Supplement).

8.5 EXEMPTION FOR CARRIAGE OF FORBIDDEN DANGEROUS GOODS.

8.5.1 *Dangerous goods forbidden for transport by air under any circumstances.*

Part 1; 2.1 of the ICAO TI specifies that ***“any article or substance which, as presented for transport, is liable to explode, dangerously react, produce a flame or dangerous evolution of heat or dangerous emission of toxic, corrosive or flammable gases or vapors under conditions normally encountered in transport must not be carried on aircraft under any circumstance.”*** An exemption will not be considered for the carriage of any such article or substance by air.

8.5.2 Dangerous ***goods forbidden for transport by air unless exempted.*** For an article or a substance whose carriage by air is forbidden, States may grant exemptions to enable its

transportation by air. CAAB may consider the grant of an exemption for carriage of such dangerous goods on cargo aircraft. The following criteria may be used to determine if an exemption would be considered:

- a) **Extreme urgency.** In deciding whether the transport is urgent, CAAB may consider why it is important for a consignment to reach its destination quickly. Dangerous goods may need to be transported because of:
- (1) humanitarian relief;
 - (2) environmental relief;
 - (3) pestilence;
 - (4) national or international security;
 - (5) saving of life (e.g. rescue); and
 - (6) limited availability at destination.

Note: Applications based on commercial reasons only will not be viewed as urgent and carriage by other forms of transport should be considered.

b) **When other forms of transport are inappropriate,** operators and /or shippers in applying for an exemption should submit to the CAAB a risk analysis which should include consideration for

- (1) *Duration of journey.* Transport by other forms may result in an unrealistic journey time and could affect the integrity of the dangerous goods;
- (2) *Infrastructure.* The availability of other forms of transport may be limited;
- (3) *Security.* The comprehensive security provisions of the air mode may reduce the possibility of unlawful interference (theft, piracy etc.);
- (4) *Routing.* Transport by air may result in a reduced risk of exposure of the public to the dangerous goods in the event of an incident or accident;
- (5) *Cost.* The cost of carriage by other forms of transport may be economically unreasonable. However, an application for exemption will not be considered based on cost alone.

c) **When full compliance with the ICAO TI is contrary to the public interest,** for example:

- (1) medical applications;
- (2) new technologies; and
- (3) enhancements in safety.

8.5.3 When seeking an exemption, the applicant should provide at least the following information:

- a) the reason, as described in paragraph 7.2 above, why it is essential the article or substance must be carried by air;
- b) the proposed safety control measures that will achieve a level of safety equivalent to that provided by the ICAO TI including a statement to that effect;
- c) the proposed proper shipping name, classification and UN number with full supporting technical data;
- d) the proposed packaging which will provide a level of safety at least equivalent to that which is needed in order to meet the applicable packing and package test requirements of the ICAO TI;
- e) quantity to be carried;
- f) any special handling required and any special emergency response information;
- g) name and address of shipper and consignee;
- h) the airports of departure, transit and destination and the proposed dates of transport;
- i) details of the operator including aircraft type, flight numbers, etc.; and
- j) where applicable, copies of the relevant exemption documents issued by other authorities.

8.5.4 An application for an exemption should be submitted to CAAB at least 2 weeks before the planned flight. Justification is to be provided for an application submitted less than 2 weeks before the planned flight.

8.5.5 The applicant is reminded that he has to obtain the exemptions from the States concerned, and any necessary permits or approvals, before the carriage by air of such dangerous goods. With regards to exemptions, the "States concerned" are the States of Origin, Operator, transit, overflight and destination.

8.6 EQUIVALENT LEVEL OF SAFETY.

8.1 The applicant will have to demonstrate to the CAAB that an overall level of safety in transport that is at least equivalent to the level of safety provided by the ICAO TI can be achieved. In determining an equivalent level of safety, the following should be conducted by the applicant:

- a) A review of the applicable regulatory provisions and instructions in the ICAO TI. This includes the identification of specific provisions and instructions that will not be met, thus requiring a determination that an equivalent level of safety will be achieved;
- b) A review of any potential increased risk to safety or property that may result from deviating from the provisions or instructions and identification of the measures

considered necessary or appropriate to address that risk. This should include substantiation with applicable analysis or an evaluation demonstrating that the proposed additional measures will achieve a level of safety that is at least equal to that required by the ICAO TI;

- c) A thorough review and risk assessment to identify and evaluate potential risks and their mitigating factors in transport. This would include a risk safety analysis addressing failure modes and effects, a systems safety evaluation, and an explanation of the measures imposed to ensure each risk factor has been evaluated.
- d) Where appropriate, risk mitigation factors and a safety analysis may be based on an analogy of the requirements in place for technologies which may pose similar risks.

8.7. Contact Person and Information.

Director
Flight Safety & Regulations
CAAB HQ, Kurmitola
Dhaka1229
Fax:+88028901418
email: dfs@caab.gov.bd