9. DANGEROUS GOODS

9.1 Information, Instructions and General Guidance on the Carriage of Dangerous Goods

9.1.1 Policy on the Transport of Dangerous Goods

(A) Transportation of dangerous goods (inclusive of articles or substances) by air is capable of posing a significant risk to human health, flight safety, the aeroplane or the environment. The safe air transport of dangerous goods is regulated and mandated by ICAO (Annex 18) and DOC 9284 AN/905 (Technical Instructions for the safe transport of dangerous goods by air) including its supplements and any other addenda or corrigenda.

(B) In respect to ICAO rules and requirements, IATA establishes and defines procedures and instructions (as published in the IATA "Dangerous Goods Regulations") for the transport of dangerous goods by air. Dangerous goods are listed and classified according to IATA Dangerous Goods Regulations.

(C) Turkish Airlines ensures that staff, accepting dangerous goods for transportation on Turkish Airlines' aeroplanes is trained accordingly.

(D) Dangerous goods accepted for transportation shall be properly classified, documented, certificated, described, packaged, marked, labeled and in a fit condition for transport in accordance with Technical Instructions as provided in the **EK.10.63.002 Dangerous Goods Manual**.

(E) Dangerous goods required to be onboard an aeroplane for operational reasons and do not require an approval are listed below but are not limited to:

(1) items for airworthiness or operating reasons or for the health of passengers or crew, such as batteries, fire extinguishers, first-aid kits, insecticides, air fresheners, life rafts, escape slides, life-saving appliances, portable oxygen supplies, tritium signs, smoke hoods, passenger service units;

(2) aerosols, alcoholic beverages, perfumes, colognes, liquefied gas lighters and portable electronic devices containing lithium metal or lithium ion cells or batteries provided that the batteries meet the provisions applicable when carried by passengers and crew) carried aboard an aircraft by Turkish Airlines for use or sale on the aircraft during the flight or series of flights, but excluding non-refillable gas lighters and those lighters liable to leak when exposed to reduced pressure; and

(3) dry ice intended for use in food and beverage service aboard the aeroplane; and

(4) electronic devices such as electronic flight bags, personal entertainment devices, credit card readers, containing lithium metal or lithium ion cells or batteries and spare lithium batteries for such devices carried aboard for use on the aeroplane during the flight or series of flights, provided that the batteries meet the provisions applicable to the carriage of portable electronic devices containing lithium or lithium ion cells or batteries by passengers. Spare lithium batteries must be individually protected so as to prevent short circuits when not in use.

9.1.1.1 Definitions

(A) Acceptance Check List: A document used to assist in carrying out a check on the external appearance of packages of dangerous goods and their associated documents to determine that all appropriate requirements have been met.

(B) Accident: An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

(1) a person is fatally or seriously injured as a result of:

(a) being in the aircraft, or

(b) direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or

(c) direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or

(d) inflicted by other persons, or

(e) when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

(2) the aircraft sustains damage or structural failure which:

(a) adversely affects the structural strength, performance or flight characteristics of the aircraft, and

(b) would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or

(3) The aircraft is missing or is completely inaccessible.

Note 1: For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified as a fatal injury by ICAO.

Note 2: An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

(C) Approval: For the purposes of compliance with EASA, as specified in the ICAO Doc 9284 Technical Instructions, an authorization issued by the Turkish DGCA for the transport of dangerous goods by air which would normally be forbidden.

(D) Cargo Aeroplane (Cargo Aircraft): Any aeroplane which is carrying goods or property but not passengers.

(E) Dangerous Goods: Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.

(F) Dangerous Goods Accident: An occurrence associated with and related to the transport of dangerous goods which results in fatal or serious injury to a person or major property damage.

(G) Dangerous Goods Incident: An occurrence, other than a dangerous goods accident, associated with and related to the transport of dangerous goods, not necessarily occurring on board an aircraft, which results in injury to a person, property 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 the aircraft or its occupants is also deemed to constitute a dangerous goods incident.

(H) Dangerous Goods in Limited Quantities: It is recognized that limited quantities of dangerous goods present a reduced hazard during transport and can therefore safety be carried on board, in good quality packaging of the types specified. Limited quantities of dangerous goods may only be carried in accordance with the applicable limitations and provisions. Only dangerous goods which are permitted on passenger aircraft and which meet the criteria of certain classes, divisions and packaging groups, may be carried under these provisions for dangerous goods in limited quantities. (Doc 9284-AN/905, Chapter 4).

(I) Dangerous Goods Transport Document: A document which is specified by the Technical Instructions. It is completed by the person who offers dangerous goods for air transport and contains information about those dangerous goods. The document bears a signed declaration indicating that the dangerous goods are fully and accurately described by their proper shipping names and UN/ID numbers (if assigned) and that they are correctly classified, packed, marked, labeled and in proper condition for transport.

(J) Exemption: For the purposes only of compliance with this Subpart, an authorization referred to in the Technical Instructions and issued by all the authorities concerned, providing relief from the requirements of the Technical Instructions.

(K) Fissile material: Uranium-233, uranium-235, plutonium-238, plutonium-239, plutonium-241 or any combination of these. Irradiated natural and depleted uranium and natural uranium or depleted uranium which has been irradiated in thermal reactors only, are not included under this definition.

(L) Freight Container: A freight container is an article of transport equipment for radioactive materials, designated to facilitate the transport of such materials, either packaged or unpackaged, by one or more modes of transport. (Note: see Unit Load Device where the dangerous goods are not radioactive materials.)

(M) Handling Agent: An agency which performs on behalf of the operator some or all of the latter´s functions including receiving, loading, unloading, transferring or other processing of passengers or cargo.

(N) ID number: A temporary identification number for an item of dangerous goods which has not been assigned a UN number.

(O) Incident: An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

(P) Mass Explosion Hazard: An explosion which effects almost the entire load virtually instantaneously.

(Q) Overpack: An enclosure used by a single shipper to contain one or more packages and to form one handling unit for convenience of handling and stowage. (Note: A unit load device is not included in this definition.)

(R) Package: The complete product of the packing operation consisting of the packaging and its content prepared for transport.

(S) Packaging: Receptacles and any other components or materials necessary for the receptacle to perform its containment function.

(T) Packing Groups: For packing purposes, dangerous goods of all classes, other than Class 1, 2 and 7, and Divisions 5.2 and 6.2, have been divided among three packing groups, according to the degree of danger they present.

(U) Proper Shipping Name: The name to be used to describe a particular article or substance in all shipping documents and notifications and, where appropriate, on packaging.

(V) Serious Injury: An injury which is sustained by a person in an accident and which:

(1) Requires hospitalization for more than 48 hours, commencing within seven days from the date that the injury was received; or

(2) Results in a fracture of any bone (except simple fracture of fingers, toes or nose); or

(3) Involves lacerations which cause severe hemorrhage, nerve, muscle or tendon damage; or

(4) Involves injury to any internal organ; or

(5) involves second or third degree burns, or any burns affecting more than 5% of the body surface; or

(6) Involves verified exposure to infectious substances or injurious radiation.

(W) State of Origin: The authority in whose territory the dangerous goods were first loaded on an aeroplane.

(X) Technical Instructions: The latest effective edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air, including the Supplement and any Addendum, approved and published by decision of the Council of the International Civil Aviation Organization. (ICAO Doc 9284–AN/905)

(Y) UN Number: The four-digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods to identify a substance or a particular group of substances.

(Z) Unit Load Device: Any type of aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo. (Note: an overpack is not included in this definition; for a container containing radioactive materials see the definition for freight container.)

9.1.2 Acceptance, Labelling, Handling, Stowage and Segregation of Dangerous Goods

9.1.2.1 Acceptance of Dangerous Goods

(A) Dangerous goods are only accepted by persons having a valid dangerous goods certificate.

(B) Before dangerous goods are accepted for air transport an acceptance check shall be carried out using a dedicated checklist of **IATA Dangerous Goods Checklist for a Non-Radioactive Shipment** or **IATA Dangerous Goods Checklist for a Radioactive Shipment**, to ensure that:

(1) Packaging, overpacks and the relevant freight container are not damaged and/or leaking;

(2) They are correctly marked and labeled and that the relevant dangerous goods transport documents have been completed correctly according to the IATA Dangerous Goods Regulations and the ICAO Technical Instructions.

9.1.2.2 Labeling, Handling and Stowage of Dangerous Goods

9.1.2.2.1 General Principles for Labelling, Handling and Stowage of Dangerous Goods

(A) The labelling and packaging rules/instructions for dangerous goods transportation in passenger or cargo aircraft specified in the IATA Dangerous Goods Regulations shall be applied. In case of incorrect or defective label and/or packaging, the dangerous goods shall not be loaded onboard a Turkish Airlines aeroplane.

(B) The shipper is responsible for all necessary marking and labelling of each package and each overpack containing dangerous goods, in compliance with IATA Dangerous Goods Regulations.

(C) Dangerous goods must not be carried in the cabin occupied by passengers or on the flight deck, except as permitted in **Subchapter 9.1.5**.

(D) Dangerous goods bearing the 'Cargo Aircraft Only' label shall not be carried on a passenger aircraft.

(E) Damaged packages shall not be loaded.

(F) Leaking or damaged packages, overpacks or freight containers may not be loaded onto an aeroplane.

(G) An aeroplane which has been contaminated by radioactive materials must be taken out of service immediately. It should not be returned into service until the radiation level at any accessible surface and the non-fixed contamination are not more than the values specified in the Technical Instructions. Attention must be paid to packing groups.

(H) When a package containing dangerous goods is found on an aeroplane that appears to be damaged or leaking, it shall be removed from the aeroplane and shall be inspected to ensure that it is in a proper condition for transport and that no damage or contamination has occurred to the aeroplane or its load.

(I) Liquids must be loaded in an upright position.

(J) Additional state regulations and variations must be adhered to.

(K) Segregations of dangerous goods table and incompatibility table shall be adhered to.

(L) For detailed information on labelling, handling and stowage of dangerous goods see **EK.10.63.002 Dangerous Goods Manual** and **EK.10.67.001 Ground Operations Manual (GOM)**.

9.1.2.2.2 Hazard Labels and Classification of Dangerous Goods

(A) **Class 1: Explosives**

(1) Division 1.1: Articles and substances having a mass explosion hazard. (Cargo IMP Code: REX, RCX, RGX as applicable)

(2) Division 1.2: Articles and substances having a projection hazard but not a mass explosion hazard. (Cargo IMP Code: REX, RCX, RGX as applicable)

(3) Division 1.3: Articles and substances having a fire hazard, a minor blast hazard and/or a minor projection hazard but not a mass explosion hazard. (Cargo IMP Code: REX, RCX, RGX as applicable)

(4) Division 1.4: Articles and substances presenting no significant hazard. (Cargo IMP Code: RXB, RXC, RXD, RXE, RXG, RXS, as applicable)

(5) Division 1.5: Very insensitive substances having a mass explosion hazard.(Cargo IMP Code: REX)

(6) Division 1.6: Extremely insensitive articles which do not have a mass explosion hazard.(Cargo IMP Code: REX)

(7) Examples of explosives include, but are not limited to: ammonium nitrate-fuel oil mixture, ammonium perchlorate, ammunition, fireworks, black powder/gun powder, blasting caps, photo flash bombs, primer cord, flares, fuses, grenades, hexolite, lead azide (wetted), mines, model rocket motors, nitrocellulose, nitroglycerin, desensitized, picrite, octonal, primers, RDX, signal devices, toy caps, tracers (for ammunition), trinitrotoluene (TNT or dynamite).

Note 1: Transportation of explosives by air is normally forbidden. Most of the explosives can be carried by cargo aircraft only due to the risks they pose. Certain explosives can be carried by passenger aircraft when applicable rules are observed.

Note 2: Only explosives in Division 1.4, compatibility group S are permitted on a passenger aircraft. Only explosives in Division 1.3, compatibility groups C and G and Division 1.4, compatibility groups B, C, D, E, G and S are permitted on a cargo aircraft. For detailed information, see **EK.10.63.002 Dangerous Goods Manual**.

(B) **Class 2: Gases**

(1) Division 2.1 Flammable gas (Cargo IMP Code: RFG)

(2) Division 2.2 Non-flammable, non-toxic gas (Cargo IMP Code: RNG or RCL)

(3) Division 2.3: Toxic gas (Cargo IMP Code: RPG)

Division 2.1

Division 2.2

Division 2.3

(4) This class comprises compressed gases; liquefied gases; dissolved gases; refrigerated liquefied gases; mixtures of one or more gases with one or more vapours of substances of other classes; articles charged with a gas, and aerosols. For detailed information, see **EK.10.63.002 Dangerous Goods Manual 8.1.1. Explosives**.

(C) **Class 3: Flammable Liquids**

(1) This class has no subdivisions. It comprises liquids or mixtures of liquids or liquids containing solids in solution or in suspension (for example paints, varnishes, lacquers, etc., but not including substances otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60°C (140°F) closed-cup test or not more than 65.6°C (150°F) open-cup test normally referred to as the flash point.(Cargo IMP Code: RFL)

(2) Examples of flammable liquids include but are not limited to: acetone, acrylonitrile, alcohols, aldehydes, amyl nitrate and nitrite, benzene, carbon disulfide, some cleaning compounds, diesel fuel, esters, methyl ethyl ketone (mek), some flavorings, some amines, some silines, dimethyl formamide (dmf), fuel oil, gasoline, hexanes, liquid hydrocarbons, kerosene, ketones, octanes, perfumes, petroleum oil, some resin solutions, rubber solution, shale oil, tars.

(D) **Class 4: Flammable Solids**

(1) Division 4.1 Flammable solids. (Cargo IMP Code: RFS)

(2) Division 4.2 Substances liable to spontaneous combustion. (Cargo IMP Code: RSC)

(3) Division 4.3 Substances which, in contact with water, emit flammable gases (Dangerous when wet). (Cargo IMP Code: RFW)



Division 4.1 Division 4.2 Division 4.3

(4) Examples for flammable solids include, but are not limited to: matches, nitrocellulose membrane filters, pentaborane, silicon powder, wetted explosives, sulfur, wetted titanium powder, zinc resinate, naphthalene.

(5) Examples for spontaneously combustible solids include but are not limited to: activated carbon, lithium alkyds, barium, phosphorus, anhydrous potassium sulfide, oily rags, seed cake, anhydrous sodium sulfide, butyl lithium.

(6) Examples of dangerous when wet solids include, but are not limited to: alkaline earth metal alloys, aluminyum powder, calcium hydride, calcium, calcium carbide, magnesium, lithium, sodium, sodium borohydride.

(E) **Class 5: Oxidising Substances & Organic Peroxide**

(1) Division 5.1: Oxidising substances. (Cargo IMP Code: ROX)

(2) Division 5.2: Organic peroxide. (Cargo IMP Code: ROP)


Division 5.1 Division 5.2

(3) Examples of oxidisers and organic peroxides include but are not limited to: many fertilizers, chlorates, chlorites, nitrates, perchlorates, perchlorites, persulfates, permanganates, peroxides, chemical oxygen generators, sodium superoxide, and pool chemicals.

(F) **Class 6: Toxic and Infectious Substances**

(1) Division 6.1: Toxic substances. (Cargo IMP Code: RPB)

(2) Division 6.2: Infectious substances. (Cargo IMP Code: RIS)

Division 6.1

Division 6.2

(3) Examples of toxic and infectious substances include but are not limited to: some pesticides, barium compounds, phenol, acrylamide, chloroform, cresols, aniline, cyanides, mercury compounds, arsenic, nicotine, xylenols, tear gas, vanadium compounds, sodium azide, cultures, regulated medical waste, patient specimens, and biological products.

(G) **Class 7: Radioactive Material**

(1) Radioactive material means any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in IATA Dangerous Goods Regulations. Radioactive materials are classified into 3 groups depending on their Transport Index (TI) values:

(a) Category I (TI:0, Cargo Imp Code: RRW)

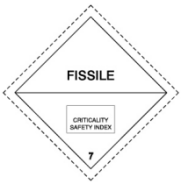
(b) Category II (TI:0.1-1.0, Cargo Imp Code: RRY)

(c) Category III (TI:11.-10 Cargo Imp Code: RRY)

Category I

Category II

Category III



Critically Safety Index Label

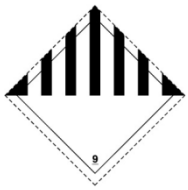
(H) **Class 8: Corrosives**

(1) Substances which by chemical action can cause severe damage when in contact with living tissue or, in the case of leakage will materially damage or even destroy, other goods or the means of transport. (Cargo IMP Code: RCM)

(2) Examples of corrosives include, but not limited to: Acetic acid, Sulfuric acid, Nitric acid, Hydrochloric acid, Perchloric acid (< 50%), Hydrofluoric acid, Ferric chloride, Formaldehyde, Gallium, Hypochlorite solutions, Chromic acid, Maleic anhydride, Mercury, Soda lime, Sodium hydroxide (lye), Ammonium hydroxide, Ethanolamine, Potassium hydroxide, Mercury.

(I) **Class 9: Miscellaneous Dangerous Goods**

(1) Articles and substances, which cannot be placed under other classes but present a danger during air transport. Aviation Regulated Solid or Liquid, Magnetized Material, Elevated Temperature Substances, Environmentally Hazardous Substances, Genetically Modified Micro-Organisms (GMMOs) or Genetically Modified Organisms (GMOs) are included in this class. (Cargo IMP Code: RMD or ICE, RLI, RLM, RSB (polymeric beads and plastics moulding compound subject to Packing Instruction 957), as applicable)

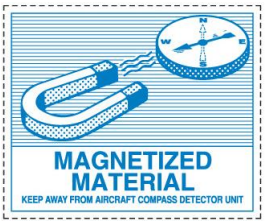


(2) Examples of this class include, but are not limited to: air bag inflators, asbestos, carbon dioxide, solid (dry ice), consumer commodity, chemical and first aid kits, life-saving appliances, engines, environmentally hazardous substances, internal combustion, vehicles (flammable gas powered), vehicles (flammable liquid powered), polymeric beads, battery-powered equipment or vehicles, zinc dithionite.

9.1.2.2.3 Handling Labels

(A) **Magnetized Materials:**

(1) "Magnetized Material" labels must be used on packages containing material with a high magnetic field strength. (Cargo IMP Code: MAG)



(B) **Cargo Aircraft Only:**

(1) Must be on packages which have been prepared according to an "ICAO" – Packing Instruction or on packages where the net quantity exceeds the limits which would be permitted for passenger aircraft.

(C) **Cryogenic Liquid Labels:**

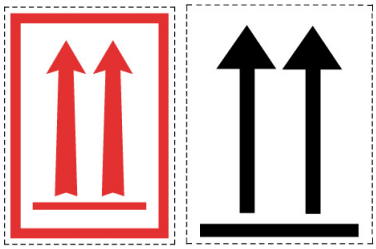
(1) Must be used in addition to the Non-Flammable Gas hazard label on packages and overpacks containing cryogenic liquids.

(D) **Keep Away From Heat Labels**:

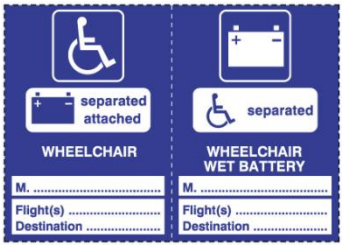
(1) Must be used on packages containing self-reactive substances in division 4.1 or organic peroxides in division 5.2.

(E) **"Package Orientation" (This way up) Labels:**

(1) Must be used on combination packages and overpacks containing liquid dangerous goods, excluding packages containing flammable liquids in inner packaging of 120 ml or less infectious substances in primary receptacles not exceeding 50 ml or radioactive material. At least two labels must be affixed (on opposite sides.) Single packaging does not need to show arrows.



(F) "Battery Powered Wheelchair and Mobility Aid Label"



(G) **Dangerous Goods in Excepted Quantities Labels:**

(1) Some dangerous goods in very small quantities may be transported under a simplified procedure. Dangerous goods in excepted quantities are not permitted in or as checked or carry-on baggage nor in the mail. They can be carried:

(a) Without the dangerous goods markings, hazard labels and shipper's declaration.

(b) No entry in the NOTOC.

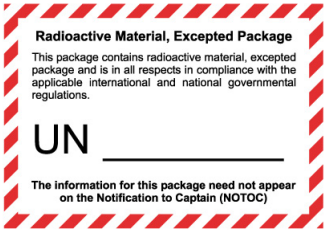
(c) No use of dangerous goods loads information codes.

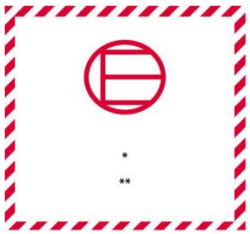
(d) No restrictions concerning incompatibilities.

(e) To be handled like normal cargo.

(f) UN specification packaging is not required.

(g) Completed handling label must be affixed.





(H) **Lithium Battery Label:**

(1) The label is placed for “Lithium ion battery” and/or “Lithium metal battery” (Cargo IMP Code: ELI or ELM), as applicable.

9.1.2.3 Segregation of Dangerous Goods

(A) Packages containing Dangerous Goods which might react dangerously with each other must not be stowed on an aeroplane next to each other or in a position that would allow interaction between them in the event of leakage. To maintain acceptable segregation between packages containing Dangerous Goods having different hazards, the segregation requirements shown in the table below must be observed.

Hazard Label	1 excl. 1.4S	2.1	2.2, 2.3	3	4.1	4.2	4.3	5.1	5.2	8	9 Note 4
1 excl. 1.4S	Note 3	X	X	X	X	X	X	X	X	X	X
2.1	X	_	_	_	_	_	_	_	_	_	X
2.2, 2.3	X	_	_	_	_	_	_	_	_	_	_
3	X	_	_	_	_	_	_	X	_	_	X
4.1	X	_	_	_	_	_	_	_	_	_	X
4.2	X	_	_	_	_	_	_	X	_	_	_
4.3	X	_	_	_	_	_	_	_	_	X	_
5.1	X	_	_	X	_	X	_	_	_	_	X
5.2	X	_	_	_	_	_	_	_	_	_	_
8	X	_	_	_	_	_	X	_	_	_	_
9 Note 4	X	X	_	X	X	_	_	X	_	_	_

Note 1: Symbol "X" at the intersection of a row and a column means that dangerous goods packages of such classes and/or divisions require segregation. The symbol "_" at the intersection of a row and a column means that dangerous goods packages of such classes and/or divisions do not require segregation.

Note 2: Divisions 1.4S, 4.1 and Classes 6, 7 and 9 are not included in table as they do not require segregations from other classes of dangereous goods.

Note 3: Explosives of Division 1.4B must not be loaded with other explosives except for Division 1.4S. When loaded on the same aircraft with exploives other than Division 1.4S, Division 1.4B explosives must be loaded into seperate unit load devices and when stowed aboard the aircraft, the unit load devices must be seperated by other Cargo with a minimum seperation distance of 2 m. When not loaded in a unit load device Division 1.4B and other explosives must be loaded into different, non adjacent loading positions and seperated by other cargo with a minimum seperation distance of 2 m.

Note 4: Packages and overpacks containing lithium ion batteries prepared in accordance with Section IA or Section IB of PI 965 and packages and overpacks containing lithium metal batteries prepared in accordance with Section IA or Section IB of PI 968 must not be stowed on an aircraft next to, or in a position that would allow interaction in the event of damage/fire with packages or overpacks containing dangerous goods which bear a Class 1, other than Division 1.4S, Division 2.1, Class 3, Division 4.1 or Division 5.1 hazard label. To maintain acceptable segregation between packages and overpacks, the segregation requirements shown in table must be observed. The segregation requirements apply based on all hazard labels applied on the package or overpack, irrespective of whether the hazard is the primary or subsidiary risk.

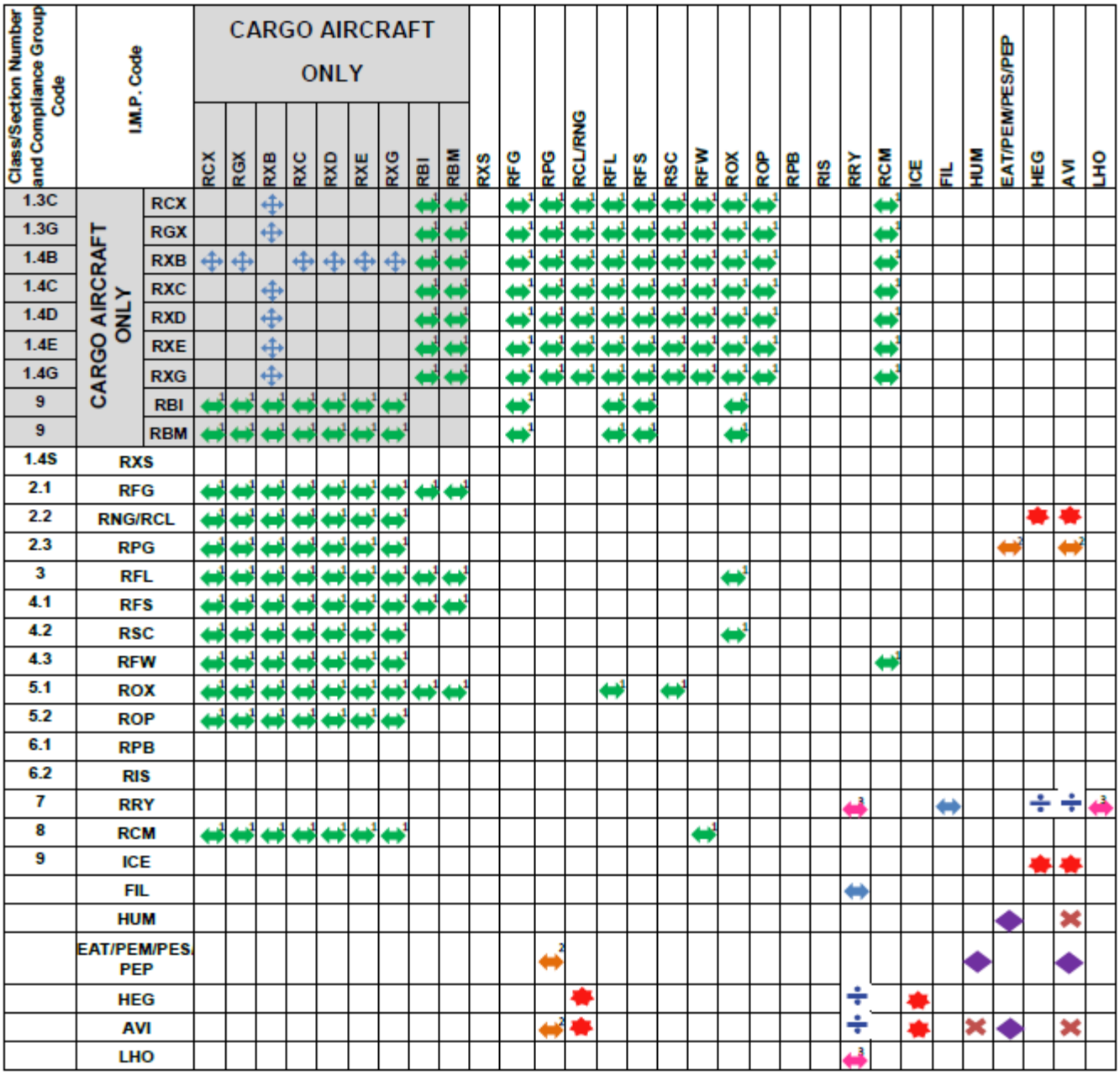
9.1.2.3.1 Separation of Explosive Substances and Articles

Division and Compatibility Group	1.3C	1.3G	1.4B	1.4C	1.4D	1.4E	1.4G	1.4S
1.3C			X					
1.3G			X					
1.4B	X	X		X	X	X	X	
1.4C			X					
1.4D			X					
1.4E			X					
1.4G			X					
1.4S								

(A) An “X” at the intersection of a row and column indicates that explosives of these divisions and compatibility groups must be loaded into separate unit load devices and, when stowed aboard the aircraft, the unit load devices must be separated by other cargo with a minimum separation distance of 2 m. When not loaded in a unit load device, these explosives must be loaded into different, non-adjacent loading positions and separated by other cargo with a minimum separation distance of 2 m. Explosive substances and articles carried under an exemption may be subject to additional separation requirements.

9.1.2.4 Special Loads Segregation Table

This table is used as special loads segregation table for loading, unloading and temporary stowage.



Note:	This table is used in the loading, unloading and temporary storage processes as a special cargo separation table in all corporation operations.
	The minimum separation distance is applied according to IATA rules. **(IATA DGR 10.9.E table)**
	Minimum 1 meter separation distance should be left on pile load planes and on ULD loaded planes 1 position empty/full container distance should be left between ULDs according to Company rule. **(IATA DGR 9.3.A)**
	Must not be loaded in the same compartment (bulk) or close ULDs.
	The minimum separation distance is applied according to IATA rules. **(IATA DGR 10.9 C and IATA DGR 10.9 D tables)**
	Animals that are natural enemies and laboratory animals should not be loaded in the same hold. **(IATA LAR 5.3)** Domestic animals (cat-dog) and HUM should not be loaded in the same hold. **(IATA LAR.10.3.5)**
	Between the ICE or RNG/RCL loaded with AVI/HEG in compartments; minimum 1 meter separation distance should be left on pile load planes and on ULD loaded planes 1 position empty/full container distance should be left between ULDs. Live animals and dry ice should not be loaded in bulk compartment together. Live Animals and Breeding Eggs must be loaded at a higher elevation than dry ice. **(IATA LAR.10.3.5)** As an exception, insects and bees can be loaded with dry ice.**(IATA LAR.10.3.4)**
	Must be in separate ULDs and 2 meters of separated space must be left between these ULDs by placing other cargo between them. When they are not in ULDs they must be in separate positions not side by side with a 2 m of distance between them. **(IATA DGR 9.3.2.2.5)**
	EAT/PEM/PES/PEP and AVI/HUM must not be loaded in the bulk compartment. Between the EAT/PEM/PES/PEP and AVI/HUM loaded in other compartments together; minimum 1 meter separation distance should be left on pile load planes and on ULD loaded planes 1 position empty/full container distance should be left between ULDs. **(IATA LAR 10.3.5 and IATA TCR 17.8.4.5 tables)**
	When live animals are loaded with category-II and category-III Radioactive substances, 0.5 meters or more distance should be left between them on flights of 24 hours and less and 1 meter of distance should be left on flights more than 24 hours. **(IATA LAR 10.3.5 table and IATA DGR 9.3.13.2)** No separation distance needs to be left for Radioactive substances in Category I-with a white label. **(IATA LAR 10.3.4)**

Note: For exceptions refer to **Subchapter 9.1.5** and for up-to-date table see **LS.67.044 Special Load Segregation Table**.

9.1.2.5 Loading of Radioactive Material

(A) Radioactive materials are articles or substances which spontaneously and continuously emit ionizing radiation, which can be harmful to the health of humans and animals and can affect photographic or X-Ray film. Whilst packagings used for the transport of radioactive material must provide protection from radiation, there is likely to be residual activity from packages offered for air transport.

(B) A Transport Index (TI) is a number which represents the level of radiation at a distance of 1 meter, assigned to a single package, overpack or freight container. The TI is used to provide control over radiation exposure, to determine categories of radioactive material for the purposes of labelling, declaration, etc. to determine whether transport under exclusive use is required and to determine spacing requirements during storage and transport. The TI for each overpack or freight container must be determined as either the sum of the transport indices of all the packages contained, or by direct measurement of radiation level.

(C) Separation From Persons:

Categories II — Yellow and III — Yellow packages, overpacks or freight containers must be separated from persons. The minimum separation distances in the following table that are to be applied are based upon the sum of TIs and these distances are from the surface of the packages, overpacks or freight containers to the nearest inside surface of the passenger cabin or flight deck partitions or floors, irrespective of the duration of the carriage of the radioactive material. If the packages, overpacks or freight containers are separated into groups, the minimum distance from the nearest inside surface of the passenger cabin or flight deck partitions or floors to each group is the distance applicable to the sum of the TIs within the individual groups, provided that each group is separated from each other group by at least three times the distance applicable to the one that has the larger sum of TIs. Alternative separation distances apply when radioactive material is being carried by a cargo aircraft and in those circumstances the minimum distances must be applied as above and also to any other areas occupied by persons. Whether carried on a passenger or cargo aircraft, in accordance with the practice of keeping exposure to radiation as low as reasonably achievable, separation distances should be extended whenever feasible.

(D) Separation From Other Radioactive Packages:

The minimum distance between two radioactive packages is three times the minimum distance needed for the package with the highest TI.

Example:

Package 1- TI: 5.5- the minimum distance required from the upper surface of the package to the ceiling of compartment is 1.15m (refer to the TI table below). If the height of the package is 50 cm, then a compartment height of 1.65m (1.15+0.5) is needed.

Package 2- TI: 4.2- the minimum distance required from the upper surface of the package to the ceiling of compartment is 1 m. Since package 1 has the greater TI, the minimum distance between these two packages shall be 3.45m (3x1.15).

Refer to the relevant AFM or see **LS.73.010 Dangerous Goods Procedures and Guidelines** for compartment heights.

Passenger or Cargo Aircraft		Cargo Aircraft Only	
Total sum of transport indexes	Minimum distance (meters)	Total sum of transport indexes	Minimum distance (meters)
0.1 – 1.0	0.30	50.1 – 60.0	4.65
1.1 – 2.0	0.50	60.1 – 70.0	5.05
2.1 – 3.0	0.70	70.1 – 80.0	5.45
3.1 – 4.0	0.85	80.1 – 90.0	5.80
4.1 – 5.0	1.00	90.1 – 100.0	6.10
5.1 – 6.0	1.15	100.1 – 110.0	6.45
6.1 – 7.0	1.30	110.1 – 120.0	6.70
7.1 – 8.0	1.45	120.1 – 130.0	7.00
8.1 – 9.0	1.55	130.1 – 140.0	7.30
9.1 – 10.0	1.65	140.1 – 150.0	7.55
10.1 – 11.0	1.75	150.1 – 160.0	7.80
11.1 – 12.0	1.85	160.1 – 170.0	8.05
12.1 – 13.0	1.95	170.1 – 180.0	8.30
13.1 – 14.0	2.05	180.1 – 190.0	8.55
14.1 – 15.0	2.15	190.1 – 200.0	8.75
15.1 – 16.0	2.25	200.1 – 210.0	9.00
16.1 – 17.0	2.35	210.1 – 220.0	9.20
17.1 – 18.0	2.45	220.1 – 230.0	9.40
18.1 – 20.0	2.60	230.1 – 240.0	9.65
20.1 – 25.0	2.90	240.1 – 250.0	9.85
25.1 – 30.0	3.20	250.1 – 260.0	10.05
30.1 – 35.0	3.50	260.1 – 270.0	10.25
35.1 – 40.0	3.75	270.1 – 280.0	10.40
40.1 – 45.0	4.00	280.1 – 290.0	10.60
45.1 – 50.0	4.25	290.1 – 300.0	10.80

(E) Separation From Live Animals:

Categories II — Yellow and III — Yellow packages, overpacks or freight containers must be separated from live animals by a distance of at least 1 meters.

(F) Separation From Undeveloped Photographic Film:

Categories II — Yellow and III — Yellow packages, overpacks or freight containers must be separated from undeveloped photographic films or plates. The minimum separation distances to be applied from the surface of the packages, overpacks or freight containers to the surface of the packages of undeveloped photographic films or plates are as follows:

Total sum of transport indexes	Duration of carriage					
	2 hours or less	2-4 hours	4-8 hours	8-12 hours	12-24 hours	24-48 hours
1	0.4	0.6	0.9	1.1	1.5	2.2
2	0.6	0.8	1.2	1.5	2.2	3.1
3	0.7	1.0	1.5	1.8	2.6	3.8
4	0.8	1.2	1.7	2.2	3.1	4.4
5	0.8	1.3	1.9	2.4	3.4	4.8
10	1.4	2.0	2.8	3.5	4.9	6.9
20	2.0	2.8	4.0	4.9	6.9	10.0
30	2.4	3.5	4.9	6.0	8.6	12.0
40	2.9	4.0	5.7	6.9	10.0	14.0
50	3.2	4.5	6.3	7.9	11.0	16.0

Note: The above table is calculated so that the radiation dose received by the films does not exceed 0.1 mSv (10 mrem).

(G) The means of securing packages or overpacks must adequately ensure that minimum separation distances are maintained at all times.

9.1.2.6 Cargo IMP Codes

AVI- Live animals

CAO- Cargo Aircraft Only

DGD- Shipper's Declaration for Dangerous Goods

EAT- Foodstuffs

FIL- Undeveloped films/Unexposed films

ICE- Carbon dioxide, solid (dry ice)

IMP- Interline Message Procedure

HUM- Human remains

MAG- Magnetized Material

LHO- Live Human Organ

PEA- Huntings trophies, skin and all articles made from or containing parts of species listed in CITES

PEF- Flowers

PEM- Meat

PEP- Fruits and vegetables

PER- Perishables

PES- Seafood/Fish for human consumption

RCL- Cryogenic Liquid

RCM- Corrosive

RCX- Explosive 1.3C

RDS- Infectious substances in Category B (UN 3373)

REQ- Dangerous Goods in Excepted Quantities

REX- To be reserved for normally forbidden Explosives, Div 1.1, 1.2, 1.3, 1.4F, 1.5 and 1.6

RFG- Flammable Gas

RFL- Flammable Liquid

RFS- Flammable Solid

RFW- Dangerous When Wet

RGX- Explosives 1.3G

RIS- Infectius Substance in Category A(UN 2814 or UN 2900)

RMD- Miscellaneous Dangerous Goods

RNG- Non-Flammable, Non-toxic Gas

ROP- Organic Peroxide

ROX- Oxidizer

RPB- Toxic substance

RPG- Toxic Gas

RRE- Excepted Packages of Radioactive Material

RRW-Radioactive Material Category I-White

RRY- Radioactive Material Categories II-Yellow and III-Yellow

RSB- Polymeric Beads

RSC- Spontaneously Combustible

RXB- Explosives 1.4B

RXC- Explosives 1.4C

RXD- Explosives 1.4D

RXE- Explosives 1.4E

RXG- Explosives 1.4G

RXS- Explosives 1.4S

VAL- Valuable cargo

XPS- Cargo carried at higher rates (maybe replaced by TK+)

9.1.3 Special Notification Requirements when Dangerous Goods are Carried

9.1.3.1 Notification in the Event of an Incident or Accident

(A) In case of an emergency, the Commander must inform ATC about the dangerous goods on board. The information should;

(1) Include the proper shipping names, class and subsidiary risks for which labels are required, the compatibility group for Class 1.

(2) The quantity and location of the dangerous goods aboard the aircraft and UN number (if assigned).

(B) For those dangerous goods for which a Dangerous Goods Transport Document is required, the Commander of an aeroplane carrying such goods must be provided with information, which can be used on board to assist in planning the response to an emergency arising in-flight involving the dangerous goods.

(C) In the event of an accident or serious incident, Turkish Airlines aircraft carrying dangerous goods as cargo 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 information to the Commander. As soon as possible, Turkish Airlines must also provide this information to the appropriate authorities of Turkish DGCA and the State in which the accident or serious incident occurred.

(D) In the event of an incident, the Turkish Airlines aircraft carrying dangerous goods as cargo must, 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 NOTOC.

(E) In addition Turkish Airlines shall ensure that for dangerous goods transported on aircraft, appropriate information is immediately available at all times (24 hours per day) for use in emergency response to accidents/incidents involving those dangerous goods at a well distributed contact at Turkish Airlines internally.

9.1.3.2 Information by Turkish Airlines in the Event of an Incident or Accident

(A) In the event of:

(1) an aircraft accident; or

(2) serious incident, where dangerous goods carried as cargo may be involved,

(3) Turkish Airlines 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 information to the pilot-in-command. As soon as possible, Turkish Airlines also provides this information to the Turkish DGCA and the State in which the accident or serious incident occurred.

(B) In the event of an aircraft incident with dangerous goods on board as cargo, Turkish Airlines must, if required to do so, provide information, without delay, to emergency services responding to the incident and to the Turkish DGCA and the State in which the incident occurred about the dangerous goods on board, as shown on the information to the pilot-in-command.

9.1.3.3 Reporting Dangerous Goods Incidents or Accidents

(A) Any type of dangerous goods incident must be reported to the Turkish DGCA and appropriate Authority of the State in which the incident took place within 72 hours of whether the dangerous goods are contained in cargo, mail, passenger's baggage or crew baggage.

(B) Any type of dangerous goods accident must be reported to the Turkish DGCA within 48 hours and to the appropriate Authority of the State in which the incident took place within 72 hours of whether the dangerous goods are contained in cargo, mail, passenger's baggage or crew baggage.

(C) Initial reports may be made by telephone or tele-fax, which must be followed by a written report. (**FR.73.0033 Dangerous Goods Occurrence Report Form** that can be found in aircraft on-board library as included in **Chapter 11**)

(D) A copy of NOTOC shall be attached to the Dangerous Goods Occurrence Reporting Form.

(E) The report shall contain all data as far as they are known at the time the report is made.

(F) Copies of the relevant documents and photographs taken should be attached to the report.

9.1.3.4 Reporting of Undeclared or Misdeclared Dangerous Goods

Turkish Airlines must report to the Authority any occasion when undeclared or mis-declared dangerous goods are discovered in cargo or mail. Such a report must be made to Turkish DGCA and to the appropriate authority of the state in which this occurred. Turkish Airlines must also report any occasion when dangerous goods not permitted as checked or carry-on baggage and on their person are discovered. An initial report shall be dispatched within 72 hours of the discovery, unless exceptional circumstances prevent this.

9.1.3.5 Information to Crew Members

(A) Crew members shall be made aware of articles and substances, which may be carried on board in the passenger cabin for operating reasons as part of the operating equipment and in passenger hand/cabin baggage, and in checked baggage in the cargo holds.

(B) Cabin crew members shall be made aware that even with the best efforts at check-in, hazardous/prohibited items may be brought on board, and if identified must be removed from the flight before departure.

9.1.3.6 Information to Passengers and Other Persons

For information provided to passengers and other persons regarding carriage of dangerous goods, see **EK.10.63.002 Dangerous Goods Manual** and **EK.10.67.001 Ground Operations Manual (GOM)**.

9.1.3.7 Notification to Commander (NOTOC)

(A) The NOTOC Form is issued by the cargo officer and brought to the aircraft in accompany of the cargo as soon as possible prior to scheduled departure time and delivered to the loading supervisor. Before loading, the NOTOC is handed over to Commander for pre-informing and after the loading, the NOTOC form is signed by the loading supervisor.

(B) Minimum two copies of the NOTOC and an extra copy for every additional leg shall be handed over to the Commander. A copy of the NOTOC form will be retained at each destination aerodrome, which will be presented to the station representative by the commander upon arrival. If there is no change regarding to location, quantity or contents to special loads at destination aerodromes, the prepared NOTOC will be valid and special load information will be transferred to the load sheet. If there is a change, then a new NOTOC shall be prepared according to original NOTOC and

changes made. The load sheet shall reflect the new special loads information. In case the Commander changes during the transit stop, the NOTOC forms shall be transferred to the incoming flight crew members. If the crew members do not meet, the hand over shall be accomplished by the station representative.

(C) The NOTOC form must be handed over to the Commander in due time prior to departure in order to ensure that the takeoff of the aircraft is not delayed because of additional checks to be made by the Commander if he deems necessary. NOTOC shall include information which specifies at least the following:

(1) The Air Waybill number (when issued);

(2) The proper shipping name and UN number or ID number as listed in these Regulations;

(3) The Class or Division, and subsidiary risks for which labels are required, by numerals and in the case of Class I, the compatibility group;

(4) The Packing Group as shown on the shippers' declaration;

(5) (for non-radioactive material) the number of packages, the net quantity, or gross weight if applicable, of each package, except that this does not apply to dangerous goods where the net quantity or gross weight is not required on the Shipper's Declaration for Dangerous Goods and their exact location. For a consignment consisting of multiple packages containing dangerous goods bearing the same proper shipping name and UN number or ID number, only the total quantity and an indication of the largest and smallest package at each loading location need to be provided. For unit load devices or other types of pallets containing consumer commodities accepted from a single shipper, the number of packages and the average gross weight;

(6) The number of packages, the net quantity of each package and their exact loading location.

(7) For radioactive materials the number of packages, their category, their transport index, if applicable, and their exact loading location;

(8) Whether the package must be carried on cargo aircraft only;

(9) The aerodrome at which the package(s) is to be unloaded; and

(10) An indication that the dangerous goods are being carried under a State exemption (where applicable).

Note 1: This includes information about dangerous goods loaded at a previous departure point and which are to be carried on the subsequent flight.

Note 2: Acceptable manual corrections on the NOTOC forms are the change of aircraft registration number, loaded position of cargo and DRY ICE quantity of catering in hold which are made and signed by the operations coordinators. However this does not prohibit manual preparation of NOTOC form by appropriately qualified personnel when no computerized form is available.

(D) The written information provided to the Commander must be readily available to him during flight. The information to the Commander must also include confirmation that there is no evidence that any damaged or leaking packages have been loaded on the aircraft.

(E) A legible copy of the information to the Commander must be retained on the ground. The NOTOC must be signed by the pilot-in-command, indicating that he has received the information. The copy, or the information contained in it must be readily accessible to the airport of last departure and next scheduled arrival, until after the flight to which the information refers. In the event of the information to the pilot-in-command being of such a size as to make in-flight

radiotelephony transmission impracticable in an emergency situation, a summary of the information should also be provided by Turkish Airlines, containing at least the quantities and class or division of dangerous goods in each cargo compartment.

The following substances and articles are classified as dangerous goods but are not required to be shown on the NOTOC:

UN Number	Item
n/a	Dangerous goods in excepted quantities
UN 2807	Magnetized material Note: Magnetized Material transported under an approval may be required to appear on the NOTOC
UN 2908	Radioactive material, excepted package - empty packaging
UN 2909	Radioactive material, excepted package-articles manufactured from depleted uranium or natural thorium or natural uranium
UN 2910	Radioactive material, excepted package-limited quantity of material
UN 2911	Radioactive material, excepted package-instruments or articles
UN 3090*	Lithium metal batteries (including lithium alloy batteries) when meeting the requirements of Section II of Packing Instruction 968
UN 3091	Lithium metal batteries contained in equipment (including lithium alloy batteries) when meeting the requirements of Section II of Packing Instruction 970
UN 3091	Lithium metal batteries packed with equipment (including lithium alloy batteries) when meeting the requirements of Section II of Packing Instruction 969
UN 3164	Articles, pressurized, hydraulic containing non-flammable gas when meeting the requirements of Packing Instruction 208 (a)
UN 3164	Articles, pressurized, pneumatic containing non-flammable gas when meeting the requirements of Packing Instruction 208 (a)
UN 3245	Genetically modified micro-organisms or Genetically modified organisms
UN 3373	Biological substance, Category B
UN 3480*	Lithium ion batteries (including lithium polymer batteries) when meeting the requirements of Section II of Packing Instruction 965
UN 3481	Lithium ion batteries contained in equipment (including lithium polymer batteries) when meeting the requirements of Section II of Packing Instruction 967
UN 3481	Lithium ion batteries packed with equipment (including lithium polymer batteries) when meeting the requirements of Section II of Packing Instruction 966

Note: * marked items in the table above are prohibited to be carried both by passenger and cargo aeroplane except as COMAT (company material) in a cargo aeroplane and in accordance with company policies, carriage of such items as COMAT by cargo aeroplane requires NOTOC.

NOTOC

TURKISH AIRLINES

SPECIAL LOAD NOTIFICATION TO CAPTAIN

Staff Id : 908651

Station Of Loading: IST	Flight No TK 0007	Flight Date: 11-Nov-2015	Aircraft Registration TC-JOB	Prepared By 908651

DANGEROUS GOODS

Station Of Unloading	AWB Number	Proper Shipping Name (Technical Name)	Class/ Div/ Comp	UN or ID Number	Sub Risk	No of Pkgs	Packing Height	Net Qty or TI per Pkg	RMC	Pkg Group	Code	ERG Code	CAO (X)	Loaded	
														ULD ID	Position

OTHER SPECIAL LOAD

Station Of Unloading	AWB Number	Contents and Description	No of Pkgs	Quantity	Supplementary Information	Code	Loaded	
							ULD ID	Position

Aircraft loaded by: (To be signed by cargo staff)	Aircraft loaded by: (To be signed by ramp staff)	Captains Signature	Other Information
There is no evidence that any damaged or leaking packages containing dangerous goods have been loaded on the aircraft	There is no evidence that any damaged or leaking packages containing dangerous goods have been loaded on the aircraft		

9.1.4 Procedures for Responding to Emergency Situations Involving Dangerous Goods

9.1.4.1 Emergency Response Guidance for Flight Crew Members

(A) In-Flight:

(1) Follow the appropriate aircraft emergency procedures for fire or smoke removal,

(2) No smoking sign ON,

(3) Consider landing as soon as possible,

(4) Consider turning off non-essential electrical power,

(5) Determine source of smoke/fumes/fire, identify the item,

(6) For dangerous goods incidents in the passenger cabin, see cabin crew and co-ordinate cabin crew actions,

(7) Determine emergency response drill code,

(8) Use guidance from the current ICAO document “Emergency Response Guidance for Aircraft Incident Involving Dangerous Goods” to help deal with incident,

(9) If time available, notify ATC of at least UN number of any dangerous goods being carried.

(B) After Landing:

(1) Disembark passengers and crew before opening any cargo compartment doors,

(2) Inform ground personnel/emergency services of nature of item and where stowed,

(3) Make appropriate entry in the AML.

9.1.4.2 Emergency Response Guidance for Cabin Crew Members

(A) Initial Action:

(1) Notify the Commander and identify item.

(B) In Case of Fire:

(1) Use standard procedure/check use of water.

(C) In Case of Spillage or Leakage:

(1) Collect dangerous goods emergency response kit or other useful items,

(2) Put rubber gloves and smoke hood or smoke mask-portable oxygen,

(3) Move passengers away from area and distribute wet towels/cloths,

(4) Place dangerous goods item in polyethylene bags,

(5) Stow polyethylene bags,

(6) Treat affected seat cushions/covers in same manner as dangerous goods item,

(7) Cover spillage on carpet/floor,

(8) Regularly inspect items stowed away/contaminated furnishings.

(D) After Landing:

(1) Identify to ground personnel dangerous goods item and where stowed,

(2) Make appropriate entry in Cabin Maintenance Log.

9.1.4.3 Duties of Other Personnel

For information on duties of other personnel, see **EK.10.63.002 Dangerous Goods Manual** and **EK.10.67.001 Ground Operations Manual (GOM)**.

9.1.5 Limitations

9.1.5.1 Provisions for Dangerous Goods Carried by Passengers or Crew

		The **pilot-in-command** must be informed of the location			See Note
		Permitted in or as **Carry-on** Baggage			
		Permitted in or as **Checked** Baggage			
1.	**Alcoholic beverages** containing more than 24% but not more than 70% alcohol by volume	Yes	Yes	No	1
2.	Securely packaged **ammunitions** in Division 1.4S (UN 0012 or UN 0014 only)	Yes	No	No	2
3.	**Avalanche rescue backpack** containing a cylinder of compressed gas of Division 2.2	Yes	Yes	No	3
4.	**Baggage with installed lithium batteries,** (smart luggage)				
	with **non-removable** batteries exceeding 0.3 g lithium metal or 2.7 Wh.	Forbidden			
	with **removable** batteries	Yes	Yes	No	
5.	**Camping stoves** and **fuel containers** that have contained a flammable liquid fuel, provided that the fuel tank and/ or container is empty.	Yes	No	No	
6.	**Chemical Agent Monitoring Equipment,** Instruments containing radioactive material such as chemical agent monitor (CAM) and/or rapid alarm and identification device monitor (RAID-M)	Yes	Yes	No	4
7.	**Disabling devices** such as mace, pepper spray, etc. containing an irritant or incapacitating substance	Forbidden			
8.	**Dry ice** carbon dioxide, solid	Yes	Yes	No	5
9.	**e-cigarettes** (including e-cigars, e-pipes, other personal vaporizers) containing batteries	No	Yes	No	6
10.	**Electro shock weapons** containing dangerous goods such as explosives, compressed gases, lithium batteries	Forbidden			
11.	**Fuel cells** used to power portable electronic devices, (cameras, cellular phones, laptop computers and camcorders etc.)	No	Yes	No	7
	Spare fuel cell cartridges	Yes	Yes	No	

12.	Small, non-flammable, **gas cartridges**				
	fitted into a self-inflating safety device such as a **life-jacket** or **vest**	Yes	Yes	No	8
	for other devices	Yes	Yes	No	9
13.	**Gas cylinders** non-flammable, non-toxic worn for the operation of mechanical limbs	Yes	Yes	No	10
14.	**Hair curlers** containing hydrocarbon gas	Yes	Yes	No	11
15.	**Heat producing articles** such as underwater torches (diving lamps) and soldering irons	Yes	Yes	No	12
16.	**Insulated packagings containing refrigerated liquid nitrogen**	Yes	Yes	No	13
17.	**Internal combustion engines** or **fuel cell engines**	Yes	No	No	14
18.	**"Safety" matches**	One One's Person		No	15
	"Strike anywhere" matches	Forbidden			
	Cigarette lighter	One One's Person		No	16
	"Blue flame cigar" lighters or **lighters** powered by **lithium battery** without a safety cap or means of protection against unintentional activation	Forbidden			

	The **pilot-in-command** must be informed of the location Permitted in or as **Carry-on** Baggage Permitted in or as **Checked** Baggage			**See Note**
19. **Mobility Aids** battery-powered **wheelchairs** or other similar mobility devices				
with **non-spillable wet batteries** or with batteries which comply with Special Provision A123 or A199	Yes	No	Yes	17
with **spillable batteries**	Yes	No	Yes	18
with **lithium ion batteries**	No	See Note 19 item 6e	Yes	19
20. **Non-radioactive medicinal** or **toiletry articles** including **aerosols** such as hair sprays, perfumes, colognes and medicines containing alcohol and; **Non-flammable, non-toxic (Division 2.2) aerosols** with no subsidiary hazard for sporting or home use	Yes	Yes	No	20
21. Oxygen or air**, gaseous cylinders** required for medical use.	Yes	No	Yes	21
Empty air cylinders for other purposes, such as scuba diving	Yes	No	No	22
22. **Permeation devices** Devices for calibrating the "air quality monitoring equipment"	Yes	No	No	23
23. **Radioisotopic cardiac pacemakers** or other devices, including those powered by lithium batteries implanted into a person or fitted externally	On One's Person		No	
24. **Security-type equipment** such as attaché cases, cash boxes, cash bags etc.	Yes	No	No	24
25. **Specimens, non-infectious** such as specimens of mammals, birds, amphibians, reptiles, fish, insects.	Yes	Yes	No	25
26. **Thermometer** or **barometer,** mercury filled carried by a representative of a **government weather bureau** or **similar official agency**	No	Yes	Yes	26
27. **Thermometer, medical or clinical** which contains mercury	Yes	No	No	27
28. **Batteries, spare / loose**				
without lithium content	No	Yes	No	28
containing **lithium metal** or **lithium ion** cells/batteries				
lithium **ion** the watt-hour rating not exceeding **100 Wh**. and lithium **metal** content not exceeding **2 g**.	No	Yes	No	28

lithium **ion** watt-hour rating exceeding **100 Wh** but not exceeding **160 Wh** for consumer electronic devices and PMED (Portable Medical Electronic Devices). lithium **metal** content exceeding **2 g** but not exceeding **8 g** for PMED only.	No	Yes	No	29
29. **Portable Electronic Devices (PED)**				
containing **non-spillable** batteries	Yes	Yes	No	30
containing **lithium metal** or **lithium ion** cells/batteries				
lithium **ion** the watt-hour rating not exceeding **100 Wh** and lithium **metal** content not exceeding **2 g**. including medical devices such as portable oxygen concentrators (POC) and consumer electronics such as cameras, mobile phones, laptops and tablets	Yes	Yes	No	31
lithium **ion** watt-hour rating exceeding **100 Wh** but not exceeding **160 Wh** including PMED (Portable Medical Electronic Devices). lithium **metal** content exceeding **2 g** but not exceeding **8 g** for PMED only.	Yes	Yes	No	32

NOTES:

1. a) must be in retail packaging;

b) no more than 5 L per individual receptacle; and

c) no more than 5 L total net quantity per person for such beverages.

Note: Alcoholic beverages containing not more than 24% alcohol by volume are not subject to any restrictions. State limitations may apply.

2. a) no more than 5 kg gross mass per person for that person's own use (excluding explosive or flammable bullets);

b) allowances for more than one person must not be combined into one or more packages.

3. a) no more than one per person;

b) may contain a pyrotechnic trigger mechanism which must not contain more than 200 mg net of Division 1.4S;

c) the backpack must be packed in such a manner that it cannot be accidentally activated; and

d) the airbags within the backpacks must be fitted with pressure relief valves.

4. a) must be securely packed and without lithium batteries; and

b) must be carried by staff members of the Organization for the Prohibition of Chemical Weapons (OPCW) on official travel.

5. a) no more than 2.5 kg per person;

b) used to pack perishables that are not subject to regulations for checked and carry on baggages.

c) the package must permit the release of carbon dioxide gas; and

d) when carried in checked baggage, each package must be marked:

— "DRY ICE" or "CARBON DIOXIDE, SOLID"; and

— the net weight of dry ice or an indication that the net weight is 2.5 kg or less.

6. They must be protected to prevent accidental activation.

7. a) fuel cell cartridges may only contain flammable liquids, corrosive substances, liquefied flammable gas, water reactive substances or hydrogen in metal hydride;

b) refuelling of fuel cells on board an aircraft is not permitted except that the installation of a spare cartridge is allowed;

c) the maximum quantity of fuel in any fuel cell or fuel cell cartridge must not exceed:

— for liquids 200 mL;

— for solids 200 grams;

— for liquefied gases, 120 mL for non-metallic fuel cells or fuel cartridges or 200 mL for metal fuel cells or fuel cell cartridges; and

— for hydrogen in metal hydride, the fuel cell cartridges must have a water capacity of 120 mL or less;

d) each fuel cell and each fuel cell cartridge must conform to IEC 62282-6-100 Ed. 1, including Amendment 1, and must be marked with a manufacturer's certification that it conforms to the specification. In addition, each fuel cell cartridge must be marked with the maximum quantity and type of fuel in the cartridge;

e) fuel cell cartridges containing hydrogen in metal hydride must comply with the requirements in Special Provision A162;

f) no more than two spare fuel cell cartridges may be carried by a person;

g) fuel cells containing fuel are permitted in carry-on baggage only;

h) interaction between fuel cells and integrated batteries in a device must conform to IEC 62282-6-100 Ed. 1 including Amendment 1. Fuel cells whose sole function is to charge a battery in the device are not permitted;

i) fuel cells must be of a type that will not charge batteries when the portable electronic device is not in use and must be durably marked by the manufacturer: "APPROVED FOR CARRIAGE IN AIRCRAFT CABIN ONLY" to so indicate; and

j) in addition to the languages which may be required by the State of Origin for the markings specified above, English should be used.

8. a) no more than one (1) device per person

b) device must be packed in such a manner that it can not be accidentally activated

c) limited to carbon dioxide or another suitable gas in Division 2.2 without subsidiary hazard;

d) cartridge(s) must be for inflation purposes;

e) device must be fitted with no more than two (2) small cartridges; and

f) not more than two spare cartridges.

9. a) no more than four small cartridges of carbon dioxide or other suitable gas in Division 2.2, without subsidiary hazard, per person; and

b) the water capacity of each cartridge must not exceed 50 ml.

Note: For carbon dioxide, a gas cylinder with a water capacity of 50 mL is equivalent to a 28 g cartridge.

10. Spare cylinders of a similar size are also allowed, if required, to ensure an adequate supply for the duration of the journey.

11. a) no more than one per person and must not be used on board at any time;

b) the safety cover must be securely fitted over the heating element; and

c) Gas refills for such curlers are not permitted in checked or carry-on baggage.

12. a) the heat-producing component and the battery are isolated from each other by the removal of the heat-producing component, the battery or another component (e.g. fuse); and

b) any battery which has been removed must be protected against short circuit (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch).

13. Must be fully absorbed in a porous material containing only non-dangerous goods.

14. (IATA DGR Special Provision A70) Internal combustion or fuel cell engines, being shipped either separately or incorporated into a vehicle, machine or other apparatus, without batteries or other dangerous goods, are not subject to these Regulations when carried as cargo, provided that:

(a) for flammable liquid powered engines:

1. the engine is powered by a fuel that does not meet the classification criteria for any class or division; or
2. the fuel tank of the vehicle, machine or other apparatus has never contained any fuel, or the fuel tank has been flushed and purged of vapours and adequate measures taken to nullify the hazard ; and
3. the shipper has provided Turkish Airlines with written or electronic documentation stating that a flushing and purging procedure has been followed; and
4. the entire fuel system of the engine has no free liquid and all fuel lines are sealed or capped or securely connected to the engine and vehicle, machinery or apparatus.

(b) for flammable gas powered internal combustion or fuel cell engines:

1. the entire fuel system must have been flushed, purged and filled with a non-flammable gas or fluid to nullify the hazard;
2. the final pressure of the non-flammable gas used to fill the system does not exceed 200 kPa at 20°C;
3. the shipper has made prior arrangements with the Turkish Airlines; and
4. the shipper has provided Turkish Airlines with written or electronic documentation stating that the flushing, purging and filling procedure has been followed and that the final contents of the engine(s) have been tested and verified to be non-flammable.

Multiple engines meeting the provisions of this special provision may be shipped in a unit load device provided that the shipper has made prior arrangements with Turkish Airlines for each consignment.

When carried as cargo and this special provision is used the words “Not Restricted” and the special provision number must be included in the description of the goods on the Air Waybill when an Air Waybill is required.

15. Small and no more than one per person.

16. a) small and no more than one per person;

b) intended for use by an individual; and

c) does not contain unabsorbed liquid fuel (other than liquefied gas).

17. a) The mobility aid must be prepared for transport to prevent:

1. unintentional activation; and
2. non-spillable batteries are not permitted to contain any free or unabsorbed liquid.

b) Turkish Airlines secures, by use of straps, tie-downs or other restraint devices, a battery powered mobility aid with installed batteries. The mobility aid, the batteries, electrical cabling and controls must be protected from damage including by the movement of baggage, mail or cargo.

c) Turkish Airlines verifies that:

1. the passenger has confirmed that the battery is a non-spillable wet battery that complies with special provision A67 or a nickel-metal hydride battery or dry battery;
2. the battery terminals are protected from short circuits, e.g. by being enclosed within a battery container;
3. the batte”ry is either:

i) securely attached to the wheelchair or mobility aid and the electrical circuits are isolated following the manufacturer's instructions; or

ii) removed by the user, if the mobility aid is specifically designed to allow it to be, following the manufacturer's instructions.

d) A passenger may carry a maximum of one spare battery

e) Turkish Airlines ensures that any battery(ies) removed from the wheelchair/mobility aid or spare batteries are carried in strong, rigid packagings which must be carried in the cargo compartment.

f) Turkish Airlines informs the pilot-in-command of the location of mobility aids with installed batteries, removed batteries and spare batteries.

g) it is recommended that passengers make advance arrangements with each operator.

18. a) Turkish Airlines secures, by use of straps, tie downs or other restraint devices, a battery powered mobility aid with installed batteries. The mobility aid, the batteries, electrical cabling and controls must be protected from damage including by the movement of baggage, mail or cargo;

b) Turkish Airlines verifies that:

1. battery terminals are protected from short circuits (e.g. by being enclosed within a battery container);
2. the battery is fitted, where feasible, wit spill resistant vent caps;
3. the battery is either:

i) securely attached to the wheelchair or mobility aid and the electrical circuits are isolated following the manufacturer’s instructions; or

ii) removed from the mobility aid following the manufacturer's instructions when the mobility aid cannot be maintained in upright position.

c) Turkish Airlines loads, stows, secures and unloads a mobility aid with & spillable battery in an upright position. If the wheelchair or mobility aid cannot be loaded, stowed, secured and unloaded always in an upright position or if

the mobility aid does not adequately protect the battery, Turkish Airlines removes the battery. The removed battery must be carried in strong, rigid packagings as follows:

1. packagings must be leak-tight, impervious to battery fluid and be protected against upset by securing them to pallets or by securing them in cargo compartments using appropriate means of securement (other than by bracing with freight or baggage) such as by the use of restraining straps, brackets or holders;

2. batteries must be protected against short circuits, secured upright in these packagings and surrounded by compatible absorbent material sufficient to absorb their total liquid contents;

3. these packagings must be marked “Battery, wet, with wheelchair” or “Battery, wet, with mobility aid” and be labelled with a “Corrosive” label and with the “Package Orientation” label.

d) the pilot-in-command must be informed of the location of the mobility aids with installed batteries and removed batteries;

e) it is recommended that passengers make advance arrangements with each operator.

19. a) the batteries must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3;

b) Turkish Airlines secures, by use of straps, tie-downs or other restraint devices, a battery powered mobility aid with installed batteries. The mobility aid, the batteries, electrical cabling and controls must be protected from damage including by the movement of baggage, mail or cargo;

c) Turkish Airlines verifies:

1. the battery terminals are protected from short circuits, e.g. by being enclosed within a battery container;

2. the battery is either:

i) securely attached to the wheelchair or mobility aid and the electrical circuits are isolated following the manufacturer’s instructions; or

ii) removed by the user, if the mobility aid is specifically designed to allow it to be, following the manufacturer's instructions. The battery removed from the mobility aid must not exceed 300 Wh, or for mobility aids fitted with two batteries, each battery must not exceed 160 Wh.

d) a passenger may carry a maximum of one spare lithium ion battery not exceeding 300 Wh or two spare batteries each not exceeding 160 Wh;

e) Turkish Airlines ensures that any battery removed from the mobility and any spare batteries are carried in the passenger cabin. The removed or spare batteries must be protected from damage (e.g. by placing each battery in a protective pouch);

f) Turkish Airlines informs the pilot-in-command of the location of the mobility aid with installed batteries, removed batteries and spare batteries;

g) it is recommended that passengers make advance arrangements with each operator

20. a) total net quantity must not exceed 2 kg or 2 L;

b) the net quantity of each single article must not exceed 0.5 kg or 0.5 L;

c) release valves on aerosols must be protected by a cap or other suitable means to prevent inadvertent release of the contents

21. As per Turkish Airlines Company Policy, gaseous oxygen or air cylinders required for medical use can only be carried as checked baggage in the cargo holds, provided that they are empty. Each cylinder must not exceed 5 kg gross weight. Cylinders, valves and regulators, where fitted, must be protected from damage that could cause inadvertent release of contents.

Note: Liquid oxygen systems are forbidden for transport.

22. May only be carried if empty.

23. Must comply with Special Provision A41.

a) each device must be constructed of a material compatible with the dangerous goods it contains;

b) the total quantity of dangerous goods in each device is limited to 2 mL and the device must not be liquid at 55"C;

c) each permeation device must be placed in a sealed, high impact-resistant, tubular inner packaging of plastic or equivalent material. Sufficient absorbent material must be contained in the inner packaging to completely absorb the contents of the device. The closure of the inner packaging must be securely held in place with wire, tape or other positive means;

d) each inner packaging must be contained in a secondary packaging constructed of metal or plastic having a minimum thickness of 15 mm. The secondary packaging must be hermetically sealed.

e) the secondary packaging must be securely packed in strong outer packaging. The completed package must be capable of withstanding, without breakage or leakage of any inner and without significant reduction in effectiveness:

1. the following free drops onto a rigid. Nan-resilient, flat and horizontal surface from a height 1.8m:

- one drop flat the bottom
- one drop flat on the top
- one drop flat on the long side:
- one drop flat on the short Side;
- one drop on a corner at the junction of three intersecting edges: and

2. a force applied to the bp surface for a duration of 24 hours, equivalent to the total weight of identical packages if stacked to a height of 3 m (including the test sample).

Note: Each of the above tests may be performed on different but identical packages.

f) the grass weight of the completed package must not exceed 30 kg.

24. Security-type equipment incorporating dangerous goods such as, lithium batteries and/or pyrotechnic material may be carried as checked baggage only if the equipment complies with the following:

a) the equipment must be equipped with an effective means of preventing accidental activation;

b) if the equipment contains an explosive or pyrotechnic substance or an explosive article, this article or substance must be excluded from Class 1 by the appropriate national authority of the State of Manufacture in compliance with 3.1.7.1

c) if the equipment contains lithium cells or batteries, these cells or batteries must comply with the following restrictions:

— for a lithium metal cell, the lithium content is not more than 1 g;

— for a lithium metal battery, the aggregate lithium content is not more than 2 g;

— for lithium ion cells, the Watt-hour is not more than 20 Wh;

— for lithium ion batteries, the Watt-hour rating is not more than 100 Wh;

— each cell or battery is of the type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3;

d) if the equipment contains gases to expel dye or ink:

— only gas cartridges and receptacles, small, containing gas with a capacity not exceeding 50 mL, containing no constituents subject to these Instructions other than a Division 2.2 gas, are allowed;

— the release of gas must not cause extreme annoyance or discomfort to crew members so as to prevent the correct performance of assigned duties; and

— in case of accidental activation, all hazardous effects must be confined within the equipment and must not produce extreme noise; and

e) security type equipment that is defective or that has been damaged is forbidden for transport.

25. Must comply with Special Provision A180.
In accordance with this provision, doping control samples taken from athletes may be carried in the cabin.

a) specimens are:

1. wrapped in paper towel and/or cheesecloth moistened with alcohol or an alcohol solution and then placed in a plastic bag that is heat sealed. Any free liquid in the bag must not exceed 30 mL; or
2. place din vials or other rigid containers with no more than 30 mL of alcohol or an alcohol solution.

b) the prepared specimens are than placed in a plastic bag that is than heat sealed.

c) the bagged specimens are than placed inside another plastic bag with absorbent material than heat sealed;

d) the finished bag is then placed in a strong outer packaging with suitable cushioning material.

e) the total quantity of flammable liquid per outer packaging must not exceed 1 L; and

f) the completed packaging is marked “scientific research specimens, not restricted”.

26. Must be packed in a strong outer packaging, having a sealed inner liner or a bag of strong leak-proof and puncture-resistant material impervious to mercury, which will prevent the escape of mercury from the package irrespective of its position.

27. a) no more than one per person;

b) must be for personal use; and

c) must be in its protective case.

28. a) articles which have the primary purpose as a power source, e.g. power banks are considered as spare batteries.

b) must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch) and carried in carry-on baggage only. Each person is limited to a maximum of 20 spare batteries however, Turkish Airlines may approve the carriage of 20 spare batteries.

c) each battery must not exceed the following:

— for lithium metal batteries, a lithium content of not more than 2 grams; or

— for lithium ion batteries, a Watt-hour rating of not more than 100 Wh; and

d) batteries and cells must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.

29. a) carried by passengers or crew for personal use;

b) no more than two individually protected spare batteries per person;

c) must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch); and

d) batteries and cells must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.

30. Batteries must meet the requirements of Special Provision A67 and maximum two spare non-spillable batteries per person can be carried.

a) the voltage of each battery must not exceed 12 V and watt-hour rating must not exceed 100 Wh;

b) then battery must not contain any free or unabsorbed liquid;

c) the device must either be either protected from inadvertent activation, or the battery disconnected and exposed terminals insulated.

d) each spare battery must be protected from short circuit by insulation of the battery terminals.

31. a) carried by passengers or crew for personal use;

b) each battery must not exceed the following:

- for lithium metal batteries, a lithium content of not more than 2 grams; or
- for lithium ion batteries, a Watt-hour rating of not more than 100 Wh;

c) if devices are carried in checked baggage, measures must be taken to prevent unintentional activation;

d) the device must be completely switched off (not in sleep or hibernation mode)

e) batteries and cells must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.

f)each person is limited to a maximum of 15 PED. However, Turkish Airlines may approve the carriage of more 15 PED.

32. the device must be completely switched off and must be protected from damage.

9.1.5.2 Other Limitations for Dangerous Goods

(A) Liquid Limitations: In order to ensure the safety of the passengers and the aircraft, Turkish DGCA has decided to tighten the control over carry-on liquid articles of passengers flying in civil aircrafts. The liquids carried by the flight crew members who are on duty are exempted from these regulations.

(B) Medication and medical devices: The list of permitted (without preconditions) medication and medical devices are as follows:

(1) Diabetes related supplies and/or equipment

(a) Blood sugar treatment up to 200 ml (8 oz) of liquid or gel

(b) Insulin and insulin loaded dispensing products:

1. Vials or box of individual vials
2. Jet injectors
3. Pens
4. Infusers preloaded syringes
5. Unlimited number of unused syringes when accompanied by insulin, lancets, blood glucose meter test strips, insulin pumps, and insulin pump supplies
6. Insulin in any form or dispenser.

(c) Epinephrine kits (for anaflaxia)

(d) Nitroglycerine pills or spray for medical use

(e) Heparin including syringes (Fraxiparine, clexane etc.)

(f) Sprays for asthma and their devices (ventolin, pulmicort etc.)

(g) Non-prescription medicine up to 100 ml (4oz)

(h) Syringes including hormone, ampoule and tablet (for hormone therapy, tube baby)

(i) Prosthetic device and tools and appliances, including drill, allen wrenches, pull sleeves used to put on or remove prosthetic devices, if carried by the individual with the prosthetic device or his or her companion

(j) Braille Note-Taker, Slate and Stylus, Augmentation Devices (special devices for the blind).

(C) Rules to follow for the medication and/or medical devices not listed above: The medication and/or medical devices that are not listed in the above list, which specifies the medication and/or medical devices that can be carried without any precondition, can still be carried by the passengers if the below conditions are met:

(1) If the passenger declare during the reservation process that he needs to use certain medication and/or medical devices throughout the flight, the passenger must be asked to bring a prescription or any other similar document that is signed/sealed by a doctor to be presented.

(2) The passenger is responsible for providing a prescription or any other similar document that is signed/sealed by a doctor during the check-in or boarding process or in the aeroplane. If the passenger can provide the required documents, he will be allowed to carry his medication and/or medical devices throughout the flight.

(3) The documents that are provided by the passenger during the check-in or boarding process must be given to the flight crew by the ground operations personnel.

(4) If it is discovered in the cabin that a passenger possesses medication and/or medical devices, especially syringes, that were not declared, he must be kept under observation. He should be advised not to leave the remainders of the syringes anywhere that might hurt the crew, cleaning personnel or other passengers accidentally, like the compartments at the back of the passenger seats.

(5) The medication and/or the medical devices must have labels on them indicating the name of the medication/medical device and the name of the manufacturer. The label must not be damaged.

(D) Carbon dioxide, solid (Dry Ice): Carbon dioxide, solid (dry ice) in quantities not exceeding 2.5 kg (5lb) per person when used to pack perishables that are not classified as dangerous goods, in checked and/or carry-on baggage (combined), provided the checked baggage (package) permits the release of carbon dioxide gas.

(1) When dry ice is carried in checked or carry-on baggage, each package must be marked: "DRY ICE" or "CARBON DIOXIDE, SOLID" with the net weight of dry ice or an indication that the net weight is 2.5 kg or less.

(2) When the aeroplane cargo compartments are loaded with carbon dioxide, solid (dry ice), all air conditioning packs (or the ground cart) and the cargo ventilation systems on Airbus aircrafts must be operational.

(3) Personnel should be alert for symptoms of excessive CO2 gas concentrations including headache, muscular weakness, ringing in the ears, shortness of breath, dizziness and drowsiness.

(E) The dry ice transportation limits of the aircraft are in the “AIRCRAFT SPECIFICATIONS” part of “AEROPLANE INFORMATION” of the NOTAMs under the name of “Dry Ice Carriage Limits”.

(F) Lithium batteries:

(1) The portable vehicles running on lithium-ion batteries such as hoverboards, segways, airwheels, balance wheels, etc. are not allowed in carry on and checked baggage. For the devices of security personnel running on lithium-ion batteries, the decision shall be taken with the coordination of the station manager.

(2) The following batteries are prohibited to be carried both by passenger and cargo aeroplane except as COMAT (company material) in a cargo aeroplane:

(a) UN 3090 lithium metal batteries packaging instruction (PI) 968 section IA, IB, II,

(b) UN 3480 lithium ion batteries PI 965 section IA, IB, II.

(3) The following batteries may be carried by passenger and cargo aeroplane observing IATA Dangerous Goods Regulations provisions and restrictions with the need to show on the NOTOC (net quantity of lithium metal / lithium ion cells or batteries per package max. 5Kg on passenger aeroplane and 35Kg on cargo aeroplane):

(a) UN 3091 Lithium metal batteries contained in equipment (including lithium alloy batteries) when meeting the requirements of Section I of Packing Instruction 970,

(b) UN 3091 Lithium metal batteries packed with equipment (including lithium alloy batteries) when meeting the requirements of Section I of Packing Instruction 969,

(c) UN 3481 Lithium ion batteries contained in equipment (including lithium polymer batteries) when meeting the requirements of Section I of Packing Instruction 967,

(d) UN 3481 Lithium ion batteries packed with equipment (including lithium polymer batteries) when meeting the requirements of Section I of Packing Instruction 966.

(4) The following batteries may be carried by passenger and cargo aeroplane observing IATA Dangerous Goods Regulations provisions and restrictions without need to show on the NOTOC (net quantity of lithium metal/ lithium ion cells or batteries per package max. 5Kg on passenger aeroplane and 35Kg on cargo aeroplane):

(a) UN 3091 Lithium metal batteries contained in equipment (including lithium alloy batteries) when meeting the requirements of Section II of Packing Instruction 970,

(b) UN 3091 Lithium metal batteries packed with equipment (including lithium alloy batteries) when meeting the requirements of Section II of Packing Instruction 969,

(c) UN 3481 Lithium ion batteries contained in equipment (including lithium polymer batteries) when meeting the requirements of Section II of Packing Instruction 967,

(d) UN 3481 Lithium ion batteries packed with equipment (including lithium polymer batteries) when meeting the requirements of Section II of Packing Instruction 966.

Lithium Battery Limitations Table

		Battery Pack	IMP Code	Packing Instruction	Limit per Package (Kg) Pax A/C	Limit per Package (Kg) Cargo A/C	Note
Lithium Ion	UN 3481	**IN** equipment	RLI	PI 967 Section I	5	35	**1**
			ELI	PI 967 Section II	5	5	**2**
		WITH equipment	RLI	PI 966 Section I	5	35	**1**
			ELI	PI 966 Section II	5	5	**2**
Lithium Metal	UN 3091	**IN** equipment	RLM	PI 970 Section I	5	35	**1**
			ELM	PI 970 Section II	5	5	**2**
		WITH equipment	RLM	PI 969 Section I	5	35	**1**
			ELM	PI 969 Section II	5	5	**2**
Lithium Ion	UN 3480	**FORBIDDEN** except as COMAT (Company Material) in cargo aircraft.					
Lithium Metal	UN 3090						
Note 1	Class 9 Hazard Labels	 			NOTOC **required**		
Note 2	Lithium Battery Marks	 			NOTOC **not required**		

9.1.6 Training for Handling Dangerous Goods

9.1.6.1 Training Requirements

Personnel must receive training in the requirements commensurate with their responsibilities. Training details are provided in **EK.10.72.001 Operations Manual Part-D 2.4.1. Transport of Dangerous Goods**.

9.1.6.2 Recurrent Training

(A) All personnel who require training on dangerous goods must receive recurrent training, as appropriate, at intervals not exceeding two years. However, there is a provision for a 3-month "window" that allows for recurrent training conducted within the final 3 months of the 24-month period to be considered to have been completed on the expiry date of the 24-month period.

(B) For example, a person who completed a course on 30 June 2007 needs to complete a revalidation by 30 June 2009. However, the revalidation may be taken between 1 April and 30 June 2009 for the revalidation to be considered to have been completed on 30 June 2009. The next revalidation date will then be 30 June 2011.

9.1.6.3 Training Records

(A) Details of all initial and recurrent training must be recorded including training subjects, date and duration of the courses. The records of training must be made available upon request to the Turkish DGCA.

(B) 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.

(C) The records of training must be made available upon request to the Turkish DGCA.

(D) Dangerous goods training records shall be retained for a minimum period of 36 months following the last training month.

9.2 Transport of Weapons, Munitions of War and Munitions of Sport Weapons

9.2.1 General

For transportation of weapons of war and munitions of war permission must be granted by the States concerned, including those being over-flown.

9.2.1.1 Weapons of War or Munitions of War

Must be stowed in the aeroplane in a place which is inaccessible to passengers during flight, firearms must not be loaded. Exceptions may be granted by all States concerned before the commencement of the flight that such weapons of war or munitions of war may be carried in circumstances that differ in part or in total from the procedures mentioned in this paragraph above.

9.2.1.2 Sporting Weapons

(A) There is no internationally agreed definition of sporting weapons. In general they may be any weapons, which is not a weapon of war or munitions of war. Specifically, a firearm, which is not a weapon of war or munitions of war, should be treated as a sporting weapon for the purpose of its carriage on an aeroplane.

(B) Sporting weapons include hunting knives, bows and other similar articles.

(C) Turkish Airlines shall take all reasonable measures to ensure that he will be informed about any intended transportation of any sporting weapons or ammunition by one of his aeroplanes.

(D) A firearm is any gun, rifle or pistol which fires a projectile and the following firearms are generally regarded as being sporting weapons:

(1) Those designated for shooting game, birds and other animals

(2) Those used for target shooting, clay-pigeon shooting and competition shooting

(3) Air guns, dart guns, starting pistols, etc.

(E) Sporting rifles, shotguns and pistols belonging to accompanying passengers for their own use, and any other kind of small arms may not be carried aboard the aeroplane except as checked baggage stowed in one of the belly compartments, not loaded and suitably packed.

9.2.1.3 Accepting the Carriage of Sporting Weapons and Ammunition

When accepting the carriage of sporting weapons, Turkish Airlines shall ensure that they are:

(1) stowed in the aeroplane in a place which is inaccessible to passengers during flight unless the Turkish DGCA has determined that compliance is impracticable and has accepted that other procedures might apply;

(2) unloaded, in the case of firearms or other weapons that can contain ammunition; and

(3) securely packed ammunition in Division 1.4S may be carried in quantities not exceeding 5 kg gross weight per person for that own person's use, excluding ammunition with explosive or incendiary projectiles. Allowance for more than one passenger must not be combined into one or more packages.

9.2.2 Information to Commander

Before the flight, the Commander must be notified by the ground handling staff of details of weapons or ammunition intended to be carried on board, including its location.

9.2.3 Acceptance and Transportation of Armed Individuals and Their Weapons

(A) Turkish Airlines complies with the provisions of international and local regulations regarding the carriage of armed individuals and their weapons. Turkish Airlines does not allow the carriage of weapons in the cabin. However, an exemption can be made only if additional conditions specified in National Civil Aviation Security Programme **(MSHGP)** and Turkish Airlines **EK.10.15.001 Security Programme** are met accordingly; Turkish Airlines ensures that:

(1) Turkish Airlines representative processing an armed passenger reviews the armed individual's credentials. These credentials must include a full-face picture of the armed individual, the signature of the authorizing officer and the official seal of the armed individual's service.

(2) The Commander is notified about the individual's name, location in the airplane, and status in the remarks section of the notification to captain form, and/or similar written form, i.e., "armed individual," "escort," "armed individual travelling with persons subject of judicial or administrative proceedings," etc.

(3) Local procedures will be established to ensure coordination between passenger processing personnel and, ramp and operations personnel to assure the pilot-in-command has been notified prior to departure from the gate.

(4) Armed individuals will not be served alcoholic beverages, and the senior flight attendant must assure that all armed individuals aboard the flight are known to each other.

(5) Escorts, if armed, keep their weapons concealed.

(6) Local authorities are notified of each armed guard aboard any flight at least 24 hours prior to departure, or immediately after Turkish Airlines receives notice of an armed guard to be carried within 24 hours. The notification shall include the identity of each armed guard, the flight itinerary, and a description of the weapon(s) carried.

(B) In Turkey, the weapons of the top government officials' security guards are carried on board civil aircraft under the conditions of National Civil Aviation Security Programme **(MSHGP)** and Turkish Airlines **EK.10.15.001 Security Programme**, provided that this is valid for the domestic line flights (Ercan/CYPRUS included) of the Turkey-registered aircraft:

(1) The ground handling agent personnel must put a mark on the passenger manifest indicating that the security guards whose identities have been authenticated are armed security guards, and inform this to the cabin chief and/or the pilot-in-command.

(2) The guards are required to carry their weapons on themselves invisibly to the other passengers without bullet in the barrel and magazine in the grip so as not to fire accidentally, or in a locked bag, again without bullet and magazine inside the weapon.