

SAFETY NOTICE

SUBJECT: Amendment to the 2021-2022 Edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Doc 9284) relating to the containment of COVID-19

GENERAL: Safety Notices (SNs) are issued by the Civil Aviation Authority – Macao, China to convey advisory information to Macao aviation entities to enhance safety. SNs contain safety-related recommendations, guidance and/or industrial best practices to specific subjects which may or may not have been addressed by established requirements and regulations.

RELATED REGULATIONS: AC/OPS/005 – Transport of Dangerous Goods by Air

APPLICABILITY: This SN applies to all Macao aviation stakeholders.

CANCELLATION: This SN is the first SN issued on this subject.

REFERENCES: The following material was referred to for the development of this SN:

- ICAO State Letter (AN 11/2.1-21/7) – Amendment to the 2021-2022 Edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Doc 9284) relating to the containment of COVID-19

1. Introduction

1.1 This Safety Notice is issued to relay the information contained in the ICAO State Letter (AN 11/2.1-21/7) regarding the amendments to the 2021-2022 Edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Doc 9284) to all Macao aviation stakeholders with the aim to support vaccines transport and use of alcohol-based hand sanitizers in aircraft.

2. Background

2.1 The Council of the International Civil Aviation Organization (ICAO) approved amendments to the 2021-2022 Edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Doc 9284) to address two issues related to the containment of COVID-19. The first is intended to facilitate the transport of COVID-19 vaccines and the second to facilitate the ability of airline operators to carry alcohol-based cleaning products and hand sanitizers for use by flight crew, cabin crew and passengers. The amendments are contained in Addendum No. 1 to the 2021-2022 Edition of the Technical Instructions which became applicable on 1 January 2021. The addendum is available on www.icao.int/safety/DangerousGoods.

- 2.2 The approved amendments contained in Addendum No. 1 to the 2021-2022 Edition of the Technical Instructions:
- makes COVID-19 vaccines containing genetically modified organisms (GMOs) or genetically modified micro-organisms (GMMOs), including those in clinical trials, not subject to the Technical Instructions;
 - removes the requirement for the lithium battery mark on packages containing COVID-19 vaccines accompanied by data loggers and/or cargo tracking devices containing lithium batteries in order to speed up the transport process; and
 - adds alcohol-based hand sanitizers and alcohol-based cleaning products to the list of dangerous goods that are not subject to the Technical Instructions on account of them being required aboard the aircraft for specialized purposes. The provision applies only when carried by the operator for use on the aircraft during the flight or series of flights for the purposes of passenger and crew hygiene.
- 2.3 For the aforementioned amendments, ICAO provided further detailed explanation and implementation information on the ICAO public website at <https://www.icao.int/safety/OPS/OPS-Normal/Pages/default.aspx> in regard to the safety transport of COVID-19 vaccines on commercial aircraft and the safety considerations for use of alcohol-based hand sanitizer in aircraft to support relevant implementation.
- 2.4 While ICAO approved the amendments to facilitate the transport of COVID-19 vaccines and the ability of airline operators to carry alcohol-based cleaning products and hand sanitizers for use by flight crew, cabin crew and passengers, it is important to note that the transport of vaccines must comply with the detailed provisions of the Technical Instructions if the vaccines are classified as dangerous goods or when the vaccines are shipped with dry ice as a refrigerant, and the airline operators shall have specific approval issued by the State of the operator for the transport of dangerous goods as cargo.

3. Recommended Actions

- 3.1 All aviation stakeholders are encouraged to note the information contained in this Safety Notice and the attached ICAO State Letter (AN 11/2.1-21/7), and take necessary measures in accordance with the information provided on the ICAO public website to ensure safe implementation for the safe transport of COVID-19 vaccines and the carriage of alcohol-based cleaning products and hand sanitizers for use on the aircraft for the purposes of passenger and crew hygiene if applicable.

- End -



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Subject: Amendment to the 2021-2022 Edition of the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) relating to the containment of COVID-19

Action required: Member States are urged to implement Addendum No. 1 to Doc 9284 without delay so as to facilitate the transport of COVID-19 vaccines

Sir/Madam,

1. I have the honour to inform you that on 31 December 2020, the Council of the International Civil Aviation Organization (ICAO) approved amendments to the 2021-2022 Edition of the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Technical Instructions, Doc 9284) to address two issues related to the containment of COVID-19. The first is intended to facilitate the transport of COVID-19 vaccines and the second to facilitate the ability of airline operators to carry alcohol-based cleaning products and hand sanitizers for use by flight crew, cabin crew and passengers. The amendments are contained in Addendum No. 1 to the 2021-2022 Edition of the Technical Instructions which became applicable on 1 January 2021. The addendum is available on www.icao.int/safety/DangerousGoods.

2. Some COVID-19 vaccines are based on genetically modified microorganisms (GMMOs) which are classified as dangerous goods in accordance with the Technical Instructions and the United Nations Recommendations on the Transport of Dangerous Goods — Model Regulations, upon which dangerous goods regulations for all modes of transport are based. Both provide an exception for GMMOs, but only in cases where they are authorized for use by the appropriate national authorities of the States of origin, transit and destination. This causes problems for manufacturers who wish to transport the vaccines before they are licensed, as the immediate availability for use would depend on authorization. This is particularly challenging when the vaccines are transported by air, due to the potential high number of States of transit that would need to be involved to except the vaccine from the classification criteria for GMMOs. The World Health Organization (WHO) and ICAO raised the issue during the 57th Session of the United Nations Sub-Committee of Experts on the Transport of Dangerous Goods (30 November to 8 December 2020). In the light of the very low risk to transport, imposing requirements on shippers and limitations on

which operators can transport these vaccines is considered contrary to public interest. The addendum, approved by Council, therefore makes COVID-19 vaccines containing genetically modified organisms (GMOs) or GMMOs, including those in clinical trials, not subject to the Technical Instructions.

3. Data loggers and cargo tracking devices needed to monitor the temperature and location of vaccines during transport are powered by lithium batteries, making the packages subject to packing instructions in the Technical Instructions that require the application of a lithium battery mark. This introduces complexities that may affect the speed at which the vaccines can be transported. The packaging for the vaccines, including the data loggers and tracking devices, are subject to robust medical standards beyond what is required by dangerous goods regulations. The addendum approved by Council removes the requirement for the lithium battery mark on packages containing COVID-19 vaccines accompanied by data loggers and/or cargo tracking devices containing lithium batteries in order to speed up the transport process.

4. The addendum includes an amendment to the Technical Instructions which adds alcohol-based hand sanitizers and alcohol-based cleaning products to the list of dangerous goods that are not subject to the Technical Instructions on account of them being required aboard the aircraft for specialized purposes. The provision applies only when carried by the operator for use on the aircraft during the flight or series of flights for the purposes of passenger and crew hygiene. The amendment supports the need for a safe, sanitary operating environment for passengers, crew and ground staff to contain the spread of COVID-19 that was highlighted in the Council Aviation Recovery Task Force (CART) guidance.

5. Further information related to transporting the COVID-19 vaccine is provided on the ICAO public website at <https://www.icao.int/safety/OPS/OPS-Normal/Pages/Vaccines-Transport.aspx>.

Accept, Sir/Madam, the assurances of my highest consideration.

Fang Liu
Secretary General