



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
MEETING OF THE WORKING GROUP OF THE WHOLE**

The Hague, 3 to 7 November 2008

Agenda Item 2: Development of recommendations for amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2011/2012 Edition

2.2: Part 2 — Classification

GAUGE OR ABSOLUTE PRESSURE IN GAS DESCRIPTION

(Presented by M. Matsui)

SUMMARY

This working paper proposes to insert the word “gauge” following 200 kPa in the provisions of the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284), Part 2;2.2.2, and to make it a requirement to add either the word gauge or absolute whenever pressure is expressed in figures in the Technical Instructions.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 DGP/21 agreed to replace 280 kPa with 200 kPa in 2;2.2.2 of the Technical Instructions which was adopted in the 2009-2010 Edition (see DGP/21-WP/86 page 2A-16). This change suggests, however, a substantial decrease in the pressure limit which is a severe policy change if you accept it at face value. This change appears to be in line with the UN Model Regulations amendment from 280 kPa absolute at 20°C to 200 kPa gauge at 15°C to which 178.7 kPa is rounded up, in order to harmonize with the ADR definition of gauge of 200k Pa at 15°C. And 200kPa at 15°C calculates roughly to 300 kPa at 20°C. As a matter of fact, the amendment has resulted in a slightly raised pressure due to rounding up to 200 kPa at which a gas is regulated. It is suggested indicating the word “gauge” following 200 kPa in 2;2.2.2 is necessary.

1.2 Paragraph 1.2.2.5 of the UN Model Regulation reads:

1.2.2.5 Pressures of all kinds relating to receptacles (such as test pressure, internal pressure, safety-valve opening pressure) are always indicated in gauge pressure (pressure

in excess of atmospheric pressure); however, the vapour pressure of substances is always expressed in absolute pressure.

The Technical Instructions, however, have no such provision.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to agree to the following amendment to 2;2.2.2:

2.2.2 Gases of Division 2.2 are not subject to these Instructions if they are transported at a pressure less than 200 kPa gauge at 20°C and are not liquefied or refrigerated liquefied gases.

Note: — The word gauge or absolute must be added whenever pressure is expressed in figures in these Instructions. In the case of pressure of packagings or receptacles, such as test pressure, internal pressure, safety-valve opening pressure, the word "gauge" must be added to the figure, while in the case of vapour pressure of substances, the word "absolute" must to be used.

— END —