Interpretation of permanently energized circuits

Transmitted by the Government of Sweden

1. 9.2.2.5.1 in ADR states that those parts of the electrical installation including the leads which shall remain energized when the battery master switch is open, shall be suitable for use in hazardous areas and meet certain standards.

2. Apparatus such as a radio, a GPS etc normally has a battery back-up and, therefore, remain energized when the battery master switch is open. It can be concluded that such equipment shall meet the general requirements of IEC 60079, parts 0 and 14 and the additional requirements applicable from IEC 60079, parts 1, 2, 5, 6, 7, 11, 15 or 18.

3. However, it can be seen from standard IEC 60079 that only electrical equipment in normal function when the battery master switch is open shall be analyzed. Radios and other apparatus not powered by the main battery when the battery master switch is open and with only an internal battery-backup energy are normally not so warm and do not contain such energy that it can generate sparks and ignite combustible atmospheres.

4. The Government of Sweden would like to know the view of WP.15 on the interpretation of the text contained in 9.2.2.5 of ADR. I.e. shall an ordinary radio or GPS meet the requirements in the standards mentioned in 9.2.2.5.1?