Use of personal electronic devices

Working Together for Safety Recommendation 041E/2020

Prepared by the Working Together for Safety Working Group: **March 2025**	Version: **Rev 01**	Working Together for Safety Project Manager: Hugo Halvorsen Hugo Halvorsen (signature on file)
Applies from: **1 June 2025**	Revision history: **Rev 00: Feb. 2020**	Approved by the Working Together for Safety Board, Chairman: Atle Houg Ringheim Atle Houg Ringheim (signature on file)

Contents

Introduction

The use of personal electronic devices is continuously increasing, and there are many different types. Most of these devices may represent an ignition source, and they must therefore only be used in a safe and controlled manner. Very little energy is required to ignite a gaseous mixture, so if combustible gases/hydrocarbons are present, the incorrect use or malfunctioning of personal electronic devices may lead to a fire or explosion.

Examples of such devices include mobile phones, personal tablets, laptops, cameras, calculators, hearing aids, e-cigarettes, smart watches and heart rate monitors, in addition to the batteries / power sources for such items.

Purpose

The purpose of this recommended practice for the handling of personal electronic devices is to reduce the risk of ignition in the event of gas leaks.

The recommendation does not cover devices such as non-Ex-certified measuring instruments, battery-operated drills and similar type of equipment used to carry out work. It is the employer's responsibility to ensure that all tools either have the necessary Ex-approval, or are suitable for use in areas where non-Ex-certified tools are permitted.

Target group and scope

The target group includes all users of personal electronic devices, as well as personnel who prepare internal guidelines / steering documents for the handling of such devices. The scope includes both onshore and offshore facilities that are subject to Norwegian Ocean Industry Authority regulations.

Overview of Changes

The requirement to terminate the transport of personal electronic equipment in the event of a gas alarm has been removed since it was unclear how this should be done. Furthermore, some minor corrections and clarifications have been made in the text and references have been added as footnotes or references in Appendix 2.

Definitions

Personal devices are defined as devices for which an individual has the full right of use.

Personal electronic devices can be divided into two categories:

1) Devices that are used for private purposes (e.g. smart watches, private mobile phones, etc.)
2) Devices that are used to perform work (e.g. laptops). In this recommendation, such items are also defined as 'electronic devices'.

Electronic devices

General considerations

The main rule is that all chargeable devices shall not be taken into classified areas. This also applies to devices that are charged by solar cells. Devices with Bluetooth connectivity and/or which can be connected to a PC/laptop are subject to the same limitations as chargeable electronic devices.

Helicopter transport

Electronic devices taken on board helicopters shall be switched off. It is not sufficient to put the device into 'flight mode' – it must be fully switched off. Offshore Norway's guideline 003[1] for security checks on helicopters contains provisions regarding prohibited and regulated items.

Personal electronic devices

Personal electronic devices that are chargeable and used for private purposes shall be stored and used in unclassified areas (e.g. offshore accommodation modules).

In order to ensure that such devices remain in unclassified areas / the accommodation module, the following actions are recommended:
- Hang posters (see Appendix 1) on all exit doors from unclassified areas
- Introduce the practice that mobile phones, smart watches and other personal electronic devices shall be stored in the changing rooms or in the cabin/office.

An exception is personal medical equipment such as hearing aids, insulin pumps, medical sensors, etc. These basically involve low risk and should be assessed individually with regard to ignition risk and area of use.

Transport of electronic devices outside accommodation modules / within onshore facility boundaries

Transportation of non-Ex-approved electronic devices outdoors should be avoided[2]. If electronic devices must be brought outside the offshore accommodation module / within the boundary of onshore facilities in order to perform *necessary work*, each facility must undertake a risk assessment and establish guidelines/routines regarding how the transportation of such devices should be handled.

When transporting such devices, it is recommended that the guidelines/routines cover at least the following points:

- The devices shall be completely switched off and carried in a bag or rucksack
- The battery shall not be removed from the unit

[1] Offshore Norge 003 Rec. guidelines for check-in and security checks at helicopter terminals
[2] Regulations on equipment and safety systems for use in potentially explosive atmospheres

- Portable electrical units shall only be charged in safe areas

Appendix 1: Sample poster

Personal electronic devices

Remember to leave behind all personal electronic devices before entering the facility!

The use of chargeable personal electronic devices can be a potential ignition source. Incorrect use or malfunction of such items can lead to fire or explosion.

Only personal medical devices (e.g. hearing aids and insulin pumps) and devices with non-rechargeable batteries (e.g. wristwatches) maybe taken into the facility.

Check whether procedures regarding the transportation of chargeable electronic devices have been established at your workplace.

See Working Together for Safety Recommendation 041E/2020 ‘Use of personal electronic devices’ for more information.

Appendix 2: Area classification and regulations

Classification of areas that may contain explosive atmospheres:

Zone 0: Areas in which explosive atmospheres are always present, or present for long periods.

Zone 1: Areas in which explosive atmospheres must be expected to be present on occasion during normal operating conditions.

Zone 2: Areas in which explosive atmospheres only arise rarely and for brief periods.

Unclassified areas: Areas in which hydrocarbons are not usually present.

Relevant regulations:
For petroleum activities at sea, the Regulations relating to the design and outfitting of facilities, etc. in the petroleum activities (the Facilities Regulations) apply. The regulations require that areas that may contain explosive atmospheres shall be classified (section 5 concerning the design of facilities). Section 10a regarding the control of ignition sources is also relevant.

For mobile facilities with production installations, the Regulations relating to mobile offshore facilities with production plants and equipment (section 14 concerning area classification) apply.

The Regulations regarding the construction and operation of gas-driven passenger ships also contain area classification requirements (section 10 concerning area classification).

Upon the application of maritime regulations, the Regulations regarding maritime electrical installations apply, cf. section 3 of the Framework Regulations concerning the application of maritime regulations in the offshore petroleum activities. During planning, which areas may be categorised as containing explosive atmospheres (section 20 concerning protection against ignition in areas containing explosive atmospheres) shall be surveyed.

The regulations regarding the handling of explosive substances require that the organisation shall survey hazards and problems that may arise during the handling of explosive substances and assess the risk on this basis (section 2-2 concerning the organisation’s requirements).

Relevant standards:

- Standard IEC 60079-series
- NEK EN 60079-14 (5.10.3)