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Telecom systems for mobile offshore units (MOU)

Telekom systemer for flyttbare offshore installasjoner

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Contents

Foreword	v
Introduction.....	vii
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	1
4 Abbreviations	3
5 General requirements and conditions.....	4
6 General functional requirements	4
6.1 Power requirement.....	4
6.2 Documentation.....	4
6.3 Process/ambient conditions	5
6.4 Operational requirements.....	5
6.5 Maintenance requirements.....	5
6.6 Isolation and sectioning	5
7 Telecommunication equipment location.....	5
8 Information technology (IT) security	6
8.1 General.....	6
8.2 Requirements	6
9 Local area network (LAN)	7
9.1 General.....	7
9.2 Requirements	7
9.3 Options	7
10 Communication links	7
10.1 General.....	7
10.2 Requirements	7
11 Wide area network (WAN).....	8
11.1 General.....	8
11.2 Requirements	8
11.3 WAN accelerators	9
11.4 Extranet services.....	9
11.5 Bandwidth allocation for voice.....	9
11.6 Bandwidth allocation for video	9
11.6.1 General.....	9
11.6.2 Mobile offshore unit using VSAT	9
11.6.3 Mobile offshore unit using high capacity link	9
11.7 Bandwidth allocation for 3rd. party.....	9
12 Private automatic branch exchange (PABX)	10
12.1 General.....	10
12.2 Requirements	10
13 Audio and video entertainment	10
13.1 General.....	10
13.2 Requirements	10
14 Ultrahigh frequencies (UHF) radio	11

14.1	General.....	11
14.2	Requirements	11
15	Public address and general alarm (PAGA)	11
15.1	General.....	11
15.2	Requirements	11
15.3	Interface requirements.....	11
	Bibliography	13

Foreword

NORSOK T-003:2019 was adopted as NORSOK Standard 2019-10-24.

NORSOK T-003:2019 supersedes NORSOK T-003 Rev. 3, February 2010.

NORSOK is an acronym for the competitive position of the Norwegian continental shelf and comprise petroleum industry standards in Norway. The collaboration initiative in 1993 between the authorities and the petroleum industry initiated the development of NORSOK standards.

Reducing the project execution time and developing and operating cost for petroleum installations on the Norwegian shelf was the target.

The intention for the Petroleum industry is to develop and use standards providing good technical and cost effective solutions to ensure that the petroleum resources are exploited and managed in the best possible way by the industry and the authorities. The industry will actively contribute to the development and use of international standards in the global market.

The NORSOK standards shall:

- bridge the gap based on experiences from the Norwegian continental shelf where the international standards are unsatisfactorily;
- replace oil company specifications where possible;
- be available as references for the authorities' regulations;
- be cost effective; and
- promote the Norwegian sector as an attractive area for investments and activities.

Developing new NORSOK standards and regular maintenance of existing standards shall contribute to maintain the competitiveness both nationally and internationally for the Norwegian petroleum industry.

The NORSOK standards are developed by experts from the Norwegian petroleum industry and approved according to the consensus principles as laid down by the guidelines given in NORSOK A-001 N directive.

The NORSOK standards are owned by the Norwegian Oil and Gas Association, the Federation of Norwegian Industries and the Norwegian Shipowners' Association. They are managed and published by Standards Norway.

The following revisions have been made:

- General
 - o Title changed to "Telecom systems for mobile offshore units" to embrace drilling/well intervention and accommodation units.
 - o References to NORSOK T-100 is removed, all relevant requirements are implemented in NORSOK T-003.
 - o Foreword and introduction are updated.
 - o Informative references are replaced by bibliography on the last page.
- Clause 1 through 3 - Technical and editorial updates
- Clause 4 - Abbreviation list is updated
- Clause 5 - Modified the principle drawing
- Clause 6 - Changed the heading from "Basic functions" to "General functional requirements" and updated the text.
- Clause 7 - Included
- Clause 8 - Technical and editorial updates

NORSOK T-003:2019

- Clause 9 - Technical and editorial updates
- Clause 10 - Technical and editorial updates
- Clause 11 - Technical and editorial updates
- Clause 12 - Technical and editorial updates
- Clause 13 - Technical and editorial updates
- Clause 14 - Technical and editorial updates
- Clause 15 - Included

Introduction

This NORSOK standard is published to adopt a minimum concept for telecommunication and IT systems for mobile offshore units used in the petroleum activities subject to Petroleum Safety Authority's (PSA) regulations.

It provides for telecom and IT systems that have sufficient capacity and security to match the requirements of the company contracting the vessel.

It is based on equipment and practices in current use, but is not intended in any way to impede development of new or improved techniques.

When used in petroleum activities in PSA's area of authority, the requirements specified in the PSA regulations apply.

The operators and their suppliers and other external partners is obliged to interpret and acknowledge the use of applicable regulatory requirements, identify their roles under the regulatory regime and incorporate these requirements into their own management and compliance systems.

The use of recognized standards is described in the PSA framework regulations [33] section 24 and accompanying guideline. Offshore mobile facilities are covered in section 25 with accompanying guideline.

Norwegian communications authority, Nasjonal kommunikasjonsmyndighet (NKOM), monitor compliance with laws, regulations and license terms and is responsible for type approval, administration of radio frequencies and administration of authorization as some of the main tasks [44].

Applicable laws and regulations for the Norwegian continental shelf can be found in bibliography.

NOTE In particular the following regulations, in addition to PSA, are essential for the use of this document: FOR 2004-02-16 nr. 401 ("Ekomforskriften") [43], FOR 2005-03-04 nr. 200 ("Autorisasjonsforskriften") [42], FOR 2014-07-01-955 [41] and FOR-2019-05-14-604 [39]. These regulations are available at <https://lovdata.no/register/forskrifter>.

The bibliography also describe important standards and guidelines applicable to this document

NORSOK requirements take precedence over an international normatively referenced standard if in conflict.

PSA gives overall requirements related to safety critical telecom equipment. IEC-61892 [21] gives requirements to installation of telecom equipment.

The operator may also have additional requirements if this document is used in a contractual arrangement.

The use of this document can involve handling of hazardous materials, operations and equipment. This document does not address all safety problems associated with its use. It is the responsibility of users of this document to take appropriate measures to ensure the safety and health of personnel prior to application of the standard and fulfil other applicable requirements for this purpose.

Normative text contains the requirements of the standard. Informative text is only guidance to the reader. All text in foreword, introduction and notes are informative text. Note to entries in section 3, and annexes to the document, may be either normative or informative.

