

# Main changes in NR493 Mooring Systems for Offshore Units

The main changes in Bureau Veritas *Mooring Systems for Offshore Units*, March 2026 edition, regarding the previous edition (July 2021) are described as follows.

## Rules history

March 2026 edition Contents	Previous edition: July 2021 Contents
<b>NR493 - Mooring Systems for Offshore Units</b>  [NR493 DT R05 E March 2026]	<b>NR493 - Classification of Mooring Systems for Permanent and Mobile Offshore Units</b>  [NR493 DT R04 E July 2021]

## Overview

This new edition of NR493 includes:

- various editorial modifications throughout the document
- updates of references to the other class rules and international standards
- updates and clarification of various technical points.

In addition, a new appendix 4 is added for the design against squall wind conditions.

### Section 1 - General

Topic	Description	Reference
<b>Floating Offshore Wind Turbine application</b>	Clarification of the applicable requirements for the stationkeeping systems of a Floating Offshore Wind Turbine	Sec 1, [1.1.2]
<b>POSA Notations</b>	Clarification of the <b>POSA</b> notations and the interface with the main rules for classification NR445 and NR645.	Sec 1, [2.2]
<b>Definitions</b>	Updates of the definitions	Sec 1, [4.1]
<b>Referenced documents</b>	Updates of the referenced documents	Sec 1, [4.2]

### Section 2 – In-service Surveys

Topic	Description	Reference
<b>Risk Based Inspection (RBI)</b>	Introduction of explicit reference to RBI approach according to NI657	Sec 1, [1.1.3]
<b>Intermediate surveys</b>	Update of the intermediate survey scope	Sec 2, [3]
<b>Class renewal surveys</b>	Addition of guidance for class renewal surveys	Sec 2, [4]

### Section 3 – Design of Mooring System

Topic	Description	Reference
<b>Methods of evaluation</b>	Clarifications about the methods of evaluations	Sec 3, [2]
<b>Interface with new Guidance Note NI691</b>	Various guidance replaced by references to the Guidance Note NI691 “Environmental conditions, loads and induced responses of marine units”	Sec 3, [2] and [3]
<b>Design tension</b>	Clarification of the design tension definition and how it is used in the various criteria	Sec 3, [6]
<b>Corrosion</b>	Clarification and minor updates of corrosion requirements	Sec 3, [9.3]
<b>Damaged conditions</b>	Clarification of the damaged mooring system state conditions	Sec 3, [10.3]
<b>Anchor holding capacity</b>	Deletion of duplicates with NI605 for holding capacity criteria and clarification of acceptable uplift for drag anchors	Sec 3, [11]

### **Section 4 – Components of Mooring System**

<b>Topic</b>	<b>Description</b>	<b>Reference</b>
<b>Materials</b>	Revision of materials requirements for overall clarity	Sec 4
<b>Shackles</b>	Shackles have been moved to non-standard fittings and only LTM designs are accepted	Sec 4, [2] and [5]
<b>In-line tensioner</b>	Addition of in-line tensioners to the non-standard fittings, with appropriate load tests	Sec 4, [5]
<b>Ancillary components</b>	Acceptable design methodologies and criteria for ancillary components have been clarified	Sec 4, [8]

### **Appendix 2 – Combination of Metocean Parameters**

<b>Topic</b>	<b>Description</b>	<b>Reference</b>
<b>Directional contour</b>	Addition of other possible directional contour methodologies, such as the NORSOK N-003 contour and other contours defined in NI638.	App 2, [2]
<b>Interface with NI691</b>	Addition of guidance defined in NI691 for waves and wind descriptions	App 2, [2]

### **Appendix 4 – Permanent mooring design in squall conditions**

<b>Topic</b>	<b>Description</b>	<b>Reference</b>
<b>General</b>	Introduction of a new Appendix about methodology and criteria for designing permanent mooring systems against squall wind conditions. This Appendix is based on SquallMoor JIP results.	App 4.