DNV-GL

Rules Update IADC Maintenance Committee 10th April 2019

Rule Updates

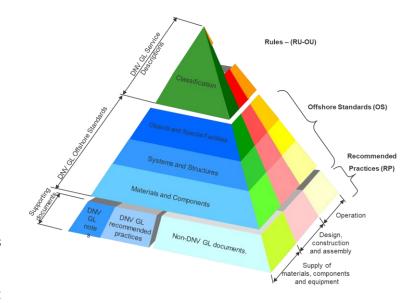
- Amendment to Ch. 3: OS-C401 "Fabrication and testing of offshore structures" – removal of requirement for Welding Workshop Approval
- OS-C401 will be revised again in July 2019 with other updates
- Also planned for publishing in July 2019:

– Rule documents:

- DNVGL-RU-OU-0101 0104
- DNVGL-RU-OU-0300 Fleet in service
- DNVGL-RU-OU-0375 Diving systems

Offshore Standards:

- DNVGL-OS-A101 Safety principles and arrangement
- DNVGL-OS-A102 Winterisation for cold climate operations
- DNVGL-OS-B101 Metallic Materials
- DNVGL-OS-C101 Design of offshore steel structures, general -LRFD method
- DNVGL-OS-C102 Structural design of offshore ship-shaped units
- DNVGL-OS-C401 Fabrication and testing of offshore structures
- DNVGL-OS-D101 Marine and machinery systems and equipment
- DNVGL-OS-D301 Fire Protection
- DNVGL-OS-E401 Helicopter decks
- DNVGL-OS-E402 Diving systems

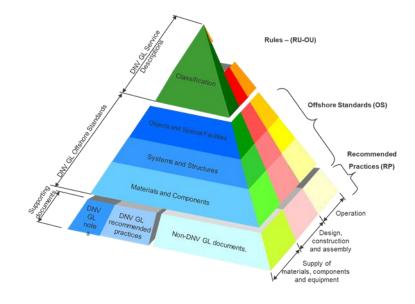


Planned changes to class notations

New Barrier notation (RU-OU-0101 to 0104)

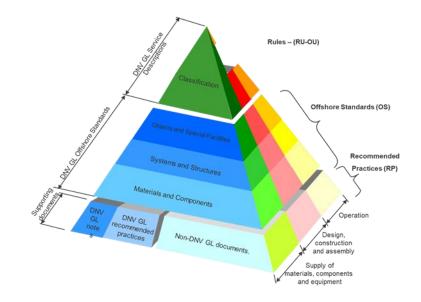
Background:

- In many operational areas owner have to implement a barrier management system
- The selected system needs to be rig specific, but there are many similarities between units of same type
- DNV GL class rules are used as basis for many of the technical requirements in the barrier management systems
- Barrier notation is introduced in DNVGL-RU-OU-0101 to 0104 (for NB units)
 - It includes a list of performance standards that cover typical systems for a MOU
 - Standard notation cover class scope, and will use Performance standard list as presented in RU-OU's
 - A qualifier (Custom) can be selected, where the performance standards and scope can be adjusted to cover additional items
- DNVGL-OS-D301 Fire Protection has been updated to introduce PS relevant for that OS. Other OS will follow in their natural update cycle.
- Benefit for clients: Barrier management can be directly linked to class scope, avoiding double work (class and additional verification)
- PROD(CAN) (RU-OU-0102)
- Class notation for Canada, Newfoundland and Labrador (C-NLOPB), technical content can be found in updated OTG-09
- UNIT(BRA) and PROD(BRA) (RU-OU-0102)
- Class notation for Brazil, technical content will be found in new OTG-22 currently under development in Brazil



Other updated or planned document changes

- DNVGL-ST-0378: Certification of offshore and platform lifting appliances
 - Harmonisation with ship crane standard, update requirements to software simulator testing, updates to align with other DNVGL rules/standards
- **DNV:** Rules for lifts
 - Complete revamp of document and publish as DNVG-ST-0495
- **OTG-08** Under water inspection in lieu of drydock (UWILD): Updated document on hearing with selected clients and flags
- **OTG-09** REGULATORY COMPLIANCE OF OFFSHORE UNITS Atlantic Canada Regions: Certifying Authority and Classification Services, published Feb 2019
- OTG-13 (Air gap) & OTG-14 (Horizontal wave impact): Will be updated in 2019 based on results from WaDeck JIP.
- OTG-16 Offshore loading buoys: Will be published early 2019
- **OTG-18** Guidance for long term near-shore mooring system, published Jan 2019
- OTG-22 REGULATORY COMPLIANCE OF OFFSHORE UNITS -OPERATION IN BRAZILIAN WATERS. Planed to be published 1H 2019
- WPI-0168 "Position mooring for fleet in service".
 - Update in 2019 to clarify requirements and correct errors in document



Summary – July 2018 updates

One new rule document:

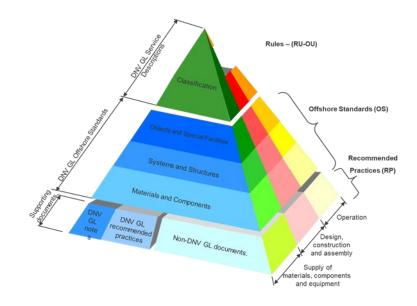
DNVGL-RU-OU-0294 Modular Systems for drilling and well

Six updated Offshore Standards:

- DNVGL-OS-B101 Metallic Materials
- DNVGL-OS-C101 Design of offshore steel structures, general - LRFD method
- DNVGL-OS-C102 Structural design of offshore ship-shaped units
- DNVGL-OS-E201 Oil and gas processing systems
- DNVGL-OS-E301 Position mooring
- DNVGL-OS-E302 Offshore mooring chain

Updated Statutory Interpretation for N-notation

 DNVGL-SI-0166 Verification for compliance with Norwegian shelf regulations



Summary – Class Notations

New class notations for modular drilling/well systems (RU-OU-0294)

- Modular drilling system with qualifiers (N), (US), (UKVS)
- Modular well system with qualifiers (N), (US), (UKVS)
- Application notations (where installed): MODU, OFFSHORE, SHIP, LAND

New class notations for ship-shaped offshore units (OS-C102)

- FAB (NDT scope according to offshore standard OS-C401)
- FAB+ (further enhanced NDT scope and fabrication tolerances according to OS-C401)
 - FAB is mandatory for harsh environment units

New POSMOOR notation qualifier (OS-E301)

(HC) - heading control

New DPS/DYNPOS notation qualifiers (RU-OU-0101)

- (CB) closed bus tie operation
- (CBT) closed bus-tie operation with enhanced qualification testing

Cyber security class notation (RU-OU-0101 to 0104)

Cyber secure - barriers against cyberattacks on MOUs, with qualifiers (+), (Basic), (Advanced)



Thank you!

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