Changes in ISO 19901-5 Rev 1 to WD Rev 3: **HIGHLIGHTS**

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**Document title**

Rev 3 has a title change from **Weight control during engineering and construction** to **Weight management**.

**50/50 weight estimate**

Deleted in Rev 2 (Rev 1 5.3.2). Concept not clearly explained and is in reference to WLB.

**Weight control classes**

Deleted in Rev 3 (Rev 1 Section 4 & Rev 2 Section 5). Classes were used to define the level of effort required for projects of varying complexity (Class A projects requiring “high definition of weight and CoG”, Class B projects requiring “medium definition of weight and CoG”, and Class C projects requiring “low definition of weight and CoG”.) Rev 3 has been modified so that all earlier Class requirements are now to be used regardless of project complexity. (I had disagreed with this approach during last major ISO meeting.) Removing the Class structure (tabular format) results in a document with improved flow and readability.

**Principles of weight management**

Added in Rev 3 as Section 5. Discusses project phases – concept to decommissioning – where weight shall be managed. Lists “primary aims (weight) during the concept design stage” and “detailed objectives of weight management”. Includes an improved graph of weight development - concept to operating – with formulas for determining Gross and predicted weight during each project phase. Presents improved definition of loading conditions to be reported – fixed, floating and subsea facilities.

**Weight budget**

Rev 3 includes updated and detailed information regarding requirements, content, loading conditions, format and CoG envelopes for providing weight budget information.

**Weight management during execution phases**

Rev 3 Section 7. Delves deeper into weight management and reporting requirements during various project phases. Where Rev 2 Section 7 dealt specifically with the weight control procedure, Rev 3 now discusses the evolution of the procedure during the different project phases.

**Weighing major assemblies**

Rev 3 Section 10 revises mandatory weighing requirements from twice (first at 70% to 85% completion then immediately prior to load out) to, minimum at the end of construction. A weighing at 70% to 85% completion has become a recommendation.

**Weight management during operations**

Rev 3 Annex E completely revises this section to present only information pertinent to this ISO document. Deleted non-essential information. Section previously read as a structural design document - rather than a weight standard.

**Weight result uncertainty**

Rev 3 Annex H provides improved information and formulae. A worked example is included.

**Weight management of concrete structures**

Added in Rev 3 Annex J. Discusses concrete density, volumes, weight and CoG, reinforcement and weight reporting.

**Coordinate systems**

Added in Rev 3 Annex K. Example figure given of fixed platform. Need to add sketches for floating facilities.