



Dar Al Riyadh Insight #48

Focus of BOD^x

Dar Al Riyadh Insights reflect the knowledge and experience of our Board, executives and staff in leading and providing PMC, design and construction management services. Dar Al Riyadh believes in the importance of broadly sharing knowledge with our clients and staff to improve project outcomes for the benefit of the Kingdom of Saudi Arabia.

Focus of BOD^x

The business basis of design or BOD^x is focused on improving the quality and cost effectiveness of the developed design throughout the full life cycle. Specifically:

- Ensures all project participants are aligned on strategic business objectives as reflected in the OPR.
- Ensures owner, construction management, and O&M are clear on wants and needs.
- Ensures designer is focused on supporting an efficient construction execution strategy that reflects project construction considerations, opportunities, and constraints.
- Informs the process for identification, evaluation, and selection of design solutions to meet functional or performance specifications.
- Provides expanded criteria to evaluate and validate design solutions and submissions.
- Provides clear acceptance criteria verified during construction, commissioning, and initial operation.
- Informs decisions on equipment selection, layout, installation, operation, maintenance, and replacement until requirements change.
- Delivers a more effective asset management database at startup.
- Improves construction efficiency and effectiveness.
- Enhances construction safety.
- Improves O&M efficiency and effectiveness.
- Supports selection of the best options by considering all life cycle costs.



The BOD^x encompasses the traditional engineering basis of design as well as an expanded basis of design encompassing construction and O&M considerations. The following Insights develop the scope and content of both the construction basis of design (CBOD) and operations and maintenance basis of design (O&MBOD). Common to each of the three basis of design requirements are the following three elements:

1. Project narrative
2. Rationale from the defined perspective
3. Validation and verification

This last element is often not adequately addressed in developed basis of design documents, but takes on increased importance as:

- Inspection technologies allow us to “see” previously undetectable flaws.
- Construction means and methods around which a design may be developed are assessed for completeness of design inclusion and actual effectiveness.
- Performance based standards and contracting take on larger roles in facility development and operation.