



Laboratory Commissioning & Validation

Providing assurance that a facility is capable of meeting biosafety requirements

Commissioning and validation are essential elements in a facility construction process, providing an assurance that all relevant measures in the specification have been incorporated into the finished facility. The facility can then be considered capable of performing as required and in accordance with internationally recognised good practices.

Our approach

The construction of high containment facilities is a complex business and there are many potential risks associated with translating the design intent into the finished facility. Commissioning and validation are important tasks, not only in ensuring the facility is capable of adequate performance, but also to minimise the risk of subsequent rework and building alterations, which can be both costly and disruptive to the program of work.

The commissioning and validation process under the guidance of the DNV as Commissioning Agent, is carried out via a number of structured and documented stages which parallel and compliment the design and construction project. The precise steps will vary according to customer requirements but would normally include:

- Design verification based upon a structured risk assessment to ensure internationally recognised standards and practices are being adopted
- A commissioning plan, including the testing principles, and schedules
- Testing and verification of components, systems, integrated systems and validation of biological requirements
- Finalisation of the commissioning report and owner acceptance.

DNV's role is to ensure all items required for inclusion in the commissioning process have been identified and recorded, together with the associated tests and check. We then make sure these are conducted satisfactorily with appropriate evidence of completion.

Throughout this process many groups have to work closely together in a structured manner if a successful outcome is to be achieved. DNV's role is critical in this regard as it provides a link between designers, contractors, suppliers and other groups, giving the owner an independent assurance that the work is being carried out to the required specification and to an acceptable standard.

Value delivered

- Independent assurance that relevant biosafety and biosecurity issues have been considered and addressed in the facility construction
- Documentation demonstrating verification of all relevant components, individual systems and integrated systems
- A structured basis for the ongoing development of maintenance plans and associated protocols.

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MANAGING RISK

