

Achieving Order From Chaos

MANAGING REGULATORY RISKS IN COMPLEX PROJECTS

Complexity or Chaos?

Major new projects are faced with an increasing burden of complexity from numerous sources, including legislation, financing arrangements and public pressure.

While many projects are successfully completed within acceptable budget and time limits, there are many examples which hit the headlines with long delays and extensive cost overruns.

Projects which lead to the operation of high hazard plants have the additional burden of requiring formal regulatory approval to operate. This will generally mean the robust demonstration, through formal reports and supporting studies, of compliance with appropriate legislation, including that risks to the workforce, the public and the environment are As Low As Reasonably Practicable (ALARP) [see Page 6]. This can add considerable extra complexity and present additional challenges for project management organisations.

From Chaos to Clarity

In these circumstances, it is critical to the success of the project that all operational and Health, Safety & Environmental (HSE) requirements and any key assumptions are well understood and clearly defined early in the project life cycle [see adjacent inset].

Successful integration of operational, HSE and design requirements during a project's infancy is vital if a cost effective solution is to be delivered in the design, construction, commissioning and operational phases.

In many instances approval routes can be complex and involve the customer and national regulatory bodies. Clear identification of these stakeholders and their early engagement can dramatically reduce project risks, particularly those that would otherwise emerge late in the project life cycle.

The introduction of project hold points with pre-determined success criteria can help to control actual and committed expenditure and often provides a much needed focus on the progress towards regulatory approval.

If this structured approach is given the same emphasis as traditional project controls, such as cost and programme tracking, order may well prevail over chaos.

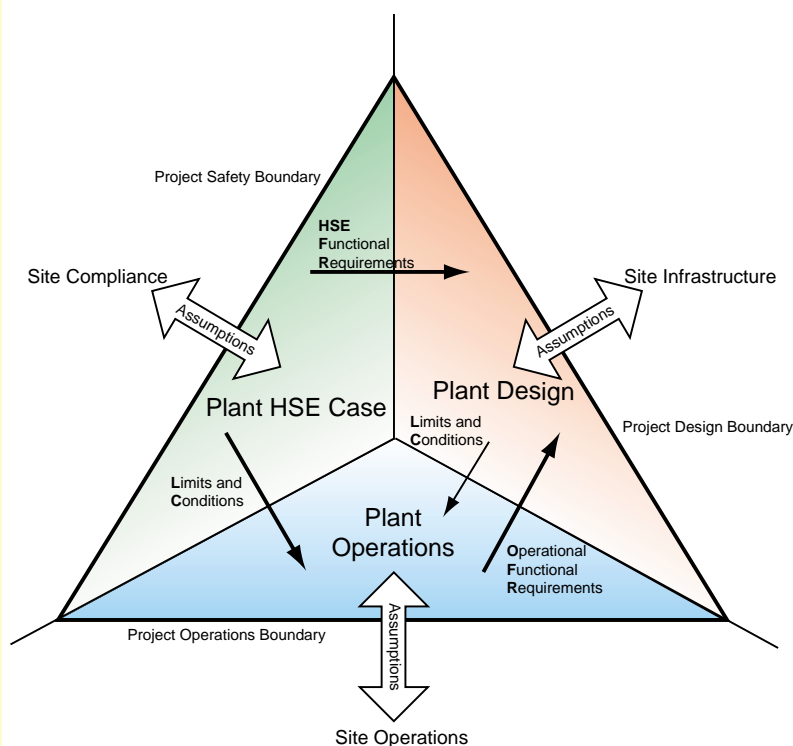


Illustration of a structured approach to the integration of Project Operational, HSE and Design requirements.

- The Project objective is to design the plant to operate safely within the regulatory regime of an existing site.
- Operational Functional Requirements ensure clear communication across the Operations-Design interface.
- HSE Functional Requirements ensure clear communication across the Safety-Design interface.
- Limits and Conditions are imposed on Operations from HSE and Design requirements (via procedures and maintenance requirements).
- A register of Assumptions (relating to Operations, Design or HSE dependencies on the site) enables the project to capture requirements and proceed. During the course of the project the Assumptions are justified and closed out.

Contact Steve Pearson for more information