Managing an engineering project is a very complex task, with various stages and many contractors and subcontractors to align to the project objectives.

It is well recognised that to build a successful project the project concept development stage is the central foundation block. Moving too quickly into the engagement phase with a FEED contractor without fully understanding what the business requires, what all stakeholders desire and discovering all the potential options and possible risks, can lead to substantial issues later in the project. Issues discovered during subsequent stages often need expensive solutions which impact upon the programme.

During the EPC phase of the project there needs to be a clear focus by the design team on minimising further change to achieve cost effective completion of bulk design. The project must be managed to ensure standards and specifications are met and client objectives are achieved.

As the project moves from construction into commissioning there is a fundamental need to ensure that robust management processes are in place. In this stage schedule pressures are present, handover of key management roles occurs, parallel working of final construction activities and the commencement of commissioning, live electrical systems and the introduction of potentially hazardous materials on site.

However maintaining the significant in-house capability to carry out these key project phases is increasingly difficult to justify in today’s business environment.

What we offer
ABB provides a range of services to help clients deliver successful projects. We act in a ‘client team’ engineering support role, providing assistance wherever needed. By drawing upon our extensive range of resources, skills and experience we can offer:

Feasibility studies
ABB can manage, facilitate and deliver feasibility studies to explore the technical and commercial options available to determine the best approach. To ensure the project is started on a sound footing ABB facilitate strategic review meetings involving all key stakeholders. In these meetings the business objectives are reviewed and project risks identified to ensure an effective project strategy is developed.
Project front end guidance
We can provide guidance on contract and procurement strategies to ensure the optimal FEED and EPC contractors are chosen and contracts are put in place that will achieve the project objectives. ABB support the engineering contractor selection process through the development of work scope and bid documentation, market research into potential engineering contractors, bid evaluation and contract negotiations.

Engineering resources
Our highly qualified and experienced engineers can work within the customers project team, filling in any resource gaps. We can provide vital support during the FEED and EPC phases of the project, acting as a gatekeeper to ensure the project requirements are met.

ABB undertake functional engineering audits of the engineering contractor to ensure compliance to agreed standards and specifications, that good engineering design practice is being deployed, and that the project is being managed with consistent best practice. ABB participates in SHE compliance reviews, detailed design reviews, value improvement activities etc, to ensure that the engineering contractor is providing the client with a facility that meets all business requirements at optimum cost.

We also use our expertise to contribute to these design review activities with fresh ideas and solutions. This can be supported with full time and part time engineering resources when and where needed. Resources could include project management, project control, SHE advisors, functional experts, construction management etc.

Benefits
- Projects are established with appropriate strategies to ensure project objectives are met
- The best fit of key engineering contractor is selected
- Monitoring of the engineering contractors performance to ensure the best design practices are adhered to and only equipment that is fit for purpose is selected
- Cost effective access to scarce specialist expertise

Why ABB?
ABB have a long track record of providing client team support in the process industries.

Our operational heritage has given us the understanding from the customer’s perspective when undertaking projects. ABB engineers are not just familiar with projects but also with working on live plants and solving day-to-day problems. This makes us ideally suited to supplement resources in a customers project team and to be trusted with acting as a customers representative with external authorities, suppliers and engineering contractors.

Our engineers have a wide work experience across the process industries, enabling them to contribute innovating ideas and best practices to a customers project.

In addition to our projects capability we have a comprehensive range and depth of functional engineering disciplines. This enables each equipment type to be studied by appropriate specialist and to be supported by other functional specialists and bespoke software.