MANAGING SAFETY STUDY ACTIONS
Rapid efficient close out

Safety studies identify and assess risks to safe and economic operation. However, risks are only effectively managed when actions are completed.

The output of a HAZOP study or similar process safety review, which may result in hundreds of actions, is not the end point. Until the actions are resolved, implemented and fully documented, it cannot be seen as complete and providing benefit.

Finding time from already stretched technical and production staff to provide the required input to the study is a real challenge for operators. This becomes even harder when the actions need either specialist input, or further valuable time from operating staff.

The risk reduction benefits from the studies can be seriously delayed as each action is reviewed and alternative options considered in order to arrive at a suitable resolution. It can be very difficult to estimate when all the actions from a study will be completed and whether they have been managed efficiently.

What we offer

Programme management
ABB can provide a dedicated safety study action team, managed by an experienced ABB project manager. The project manager plans the assignment, establishes the team, sets up the project framework and reporting mechanisms, and drives completion of actions by the team.

The ABB team, selected as a mix of resources to reflect the variety of actions to be addressed, all have plant or ‘brownfield’ project experience so can operate without significant client support. This integrated core team would normally have full access to the client’s data and systems and works either from client site or the ABB office, to facilitate easy access to plant data and ABB functional support. The team would agree the priorities for resolving actions. These are generally determined by the need to drive down significant risks as quickly as possible, but may also reflect the timing of planned outages to allow implementation of solutions.
Grouping similar actions and identifying similar issues across different process systems and equipment enables the ABB combined team to work through a number of actions in parallel. This is not only efficient but it is also helpful for the client in understanding where there are system-wide issues that need to be addressed on a consistent basis across the asset base.

A key part of programme management is the use of an Earned Value (EV) measurement system. This allows us to effectively track the progress being made on each Action through the life of the project and to have a reliable estimate of the percentage completion of the programme of work as it progresses.

This gives confidence that the overall programme of risk reduction is being managed in a structured way, with realistic completion targets.

Specialist support
ABB has a full range of specialist engineering and process safety engineers and consultants available to support the core team. They can be efficiently engaged, as needed, to provide specialist input to the development of solutions. Typical examples include:

- Process modelling
- Piping stress analysis
- Metallurgical / materials expertise
- Equipment integrity assessment
- ALARP assessment, etc.

Benefits
ABB have good experience of estimating and delivering programmes of work involving the close out of actions raised in HAZOPs and other safety studies. That allows us to quickly assess the resources and schedule required to deliver this type of programme, giving confidence to both operations management and to regulators:

- Actions are closed out rapidly and efficiently
- A team of 4 people can typically close out 30+ actions per month
- Project earned value monitoring and reporting is in place to forecast when actions will be completed and to monitor efficiency
- The focus is on finding solutions that are safe and simple, avoiding plant modifications where possible
- The rationale for all decisions is justified and recorded

Why ABB?
We have all the specialist skills required to find the most appropriate and cost effective solutions to safety study actions. These skills include process safety specialists, process and functional engineers, materials specialists and human factors specialists. Most of our engineers and consultants have an operational background and use their experience to make pragmatic technical judgements. This allows the development of solutions which avoid unnecessary implementation cost or complexity.

We have the resources and programme management processes to give confidence we can estimate, deliver and manage programmes of safety action close out work. We prefer to work in partnership with our customers so that we deliver benefits together and we transfer relevant skills to our customer for ongoing improvement.