Specialist Environments

Construction works in many sectors of which a number of them have very specialist quality requirements which must be obeyed. It helps, when working in these sectors, to have an appreciation of what is their normal and usual requirements and standards, which may differ considerably from industry norms.

Nuclear is a prime example of this requiring checking of the design and the construction methods and materials to a standard more akin to aerospace than construction and far in excess of industry norms or requirements. While the ConSIG is actively looking to engage with the NucSIG to prepare some clear guidance to help quality managers coming into this industry it is hoped that this section will become a foundation for this liaison.

Close behind in terms of detail in quality required is the Rail sector. While for most this means Network Rail and its corporate quality standards that must be adhered to it also includes other players who have their own discrete systems that must be satisfied such as London Underground (LUL) and Docklands Light Railway (DLR) as well as the various tramways and guided busways now being developed around the country.

Roads and road building also have their own standards and complying with this is also generally mandatory. Often these requirements apply if the road is privately owned or is to be adopted by the local council.

Working with and constructing assets that are associated with process plant can bring its own challenges. The type of process often dictates the form and the materials to be used in the building of the asset and can affect quality activities considerably leading to lots of variation in the quality standard required in each project and even within the project on occasion. The high level of M&E involvement can represent a co-ordination challenge large enough to tax any quality professional.

Other specialist environments can be determined by the work location. A prime example of this is the Marine environment which generally refers to the requirements from the marine microclimate rather than just being on water. As this microclimate is generally agreed to extend up to 30 miles inland from water it is possible to be in a marine environment without actually knowing it, especially when building in a seaside town or suchlike. Because this specialism is dependant on location it can often be combined with other specialist environments such as rail.

Specialist environments can also be created by the construction methodology being employed. An example of this is tunnelling which requires stringent and specialist quality controls in order to ensure that the works are progressed safely.

Finally many construction companies are involved with mining activity. This may seem surprising at first glance but many mining activities can be considered as civil engineering with the excavated arising's being the desired product rather than a byproduct or waste.