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Case Studies

At Emptor Plus Ltd (EPL) we are passionate about UK infrastructure and technology supply chain development and growth. It's what we're really about. We focus on knowledge, capability and readiness levels to leverage success and growth within supply chains. This is particularly important given the extremely challenging times and game changing conditions we are all experiencing.

Importantly, we recognise that global markets, the very basis of trade and economic activity and growth, are also facing severe headwind challenges, uncertainty, volatility, and exceptional levels cost focused competition. There are, however ongoing and evolving infrastructure programmes where credible and valuable supply chain opportunities exist today or are expected to emerge are markets and other challenges find their new level of normality. These will be across various regional-domestic, and international programmes within high integrity and complex technology sectors. For these, the UK has the very capabilities, experience and available skills required.

EPL has engaged with and supported activities within these high integrity and complex technology sectors and their emerging supply chain members, organisations and related trade and professional bodies., In this regard, EPL has provided experience-based tailored development guidance, to aid achievement of new and improved levels market readiness for qualification, contract awards and ultimate economic business growth.

By way of examples of our support, we have included a selection of case study summaries. There overview where we have helped companies and organisations on their journeys to their success. We very much hope that these provide a meaningful insight into how EPL is able to help your business and its people to:

- Learn from
- Develop based on
- Grow as a result of and
- Ultimately engineer sustainable business success.

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Passionate about Nuclear & Energy Supplier and Supply Chain Development

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Supplier development programme support

With decades of industry supply chain experience to draw on EPL has provided on-going architectural design and direction guidance along with application training to assist with the operational embedding of national UK leading sector-specific supplier development programmes. This was, the Nuclear AMRC's 'Fit for Nuclear' (F4N), a 'best practice' supplier and, 'Sharing-in-Growth' (SiG) specialist high-integrity development programmes. These were offered on an industry wide basis.

From evolution and through the decade, since launch, EPL ensured that programme and delivery methodologies, and business outcomes, maintained strong alignment with sector needs and expectations. This included evolution guidance which involved continuous and rigorous challenging on business excellence standards, validation activities and enhancements geared towards the accommodation of sector specific expectations. EPL also supported programme change management activities, automation and, 'sustain and maintain' enhancement activities. These were to enable lifecycle programme strengthening to ensure value that value and necessary business benefits were achieved by participating supply chain members and ultimately in-sector Buyer organisations, who operate at differing tier levels.

Throughout, EPL has provided direct to programme and to supply chain member on-going support, dedicated training and industry guidance. EPL also provided programme delivery market and execution training for staff members. This was in a variety of forms, including one-to-one and at wider workshop levels, with an objective to ensure that consistency of market readiness and business development standards in terms of quality and realised outcome.

Our experience-based guidance resulted in programme recognition and endorsement being achieved from both industry and BEIS which led to continued funding to enable access widening to credible UK supply chain companies. regardless of sector pre-existing experience.

Above all, our experienced-based support has assisted with the creation of sustainable UK jobs and business growth for participating companies and across a cross-section of related industrial sectors.



Procurement activity pre-qualification essentials

EPL has been able to draw on decades of supply chain and direct procurement experience to assist organisations and companies understanding of procurement cycles and qualification activities. This included insider-views in terms how these cycles work in practice and therefore how seller organisations should manage and with them to achieve the best effect. Through our experience, we have a real understanding of the frustrations and, what and where the avoidable pitfalls are. We know that these can and do lead to highly capability and credible organisations missing out, failing to qualify for, on valuable opportunities, which we're keen to help many avoid. Using our hands-on knowledge and experience we have used our awareness training material to provide insights into the key principles and steps to be taken during early stage engagement activities. These were designed to help organisations and companies navigate more compliantly, and successfully, through these 'buyer' processes.

EPL has, specifically, guided organisations and companies on how to understand the resource-critical importance, and value, of bid - no-bid strategies, along with supporting tools. EPL has also used this to help organisations and companies understand and evolve more effective strategies relating to 'make or buy' considerations within their respective business(es). This includes the all-important subject matters of risk, project management, estimating and contracting considerations when working on market-entry pre-qualification tender preparation activities.

Through a number of workshops and training activities, provided by EPL, supply chain organisations and companies have benefitted from key insights provided along with guidance and best-practice suggestions on how to apply improved, and more beneficial, approaches when future pre-qualification and tendering opportunities arise. EPL has provided essentials learning support on a direct basis and equally through leading bodies and organisations such as the UK's National Skills Academy and industry specialist Universities.



Industry codes and standards expectations

In common with many industrial and commercial sectors, nuclear is no different in terms of specific expectations, requirements and nuances. As we know, nuclear is a complex and highly safety and security sensitive industry. As such, there are part of nuclear that work to some of the most stringent standards and highly challenging requirements, to be found anywhere. These are often set out within specific international codes and standards. Examples include standard ISO's (International Organisations for Standards), ASME (American Society of Mechanical Engineers), RCC-M (English translation: Design and Construction Rules for the Mechanical Components of Nuclear Islands), to name but a few. Whilst there are many more codes and standards to consider, including client generated equivalents as are often found in company specific contract documentation sets, EPL has provided valuable guidance on what should be expected and why, in order to be both credible and successful in high-integrity sectors such as nuclear.

In general, standards do set out the rules for design and or supply of materials, equipment, components, products to be used in the nuclear sector. This will include dependencies based on what the items of supply are and, where they may be fitted, including their function and purpose from a safety and quality specific perspective, within a plant on a nuclear site or similar facility.

Drawing on our experience, we at EPL have recognised the daunting challenges faced by many organisations and companies wanting to further develop in, or access, new markets, such as nuclear. To assist, EPL has provided essential training, in the form of workshop presentations to numerous organisations and companies. These provided essential levels of learning and appreciation, in terms of what it means to work in a high integrity regulated environments. Our training has drawn on a wide cross-section of sectors, internationally recognised codes, standards, comparable specifics and other related client-company documents, from a general quality, organisational and operational perspective. From this we have been able to draw on the common themes and related expectations, such that organisations and companies, alike, can understand and determine the business impact, effect and risk more easily.

With an essential level of knowledge, organisations and companies have become that much better placed, and informed, when entering into credible dialogue with potential client-companies.

Derived benefits, in particular, included increased confidence along with that of a greater level of awareness in terms of tender preparation and business risks.



Regulatory process fundamentals

Being au-fait with regional regulatory processes may seem to be far removed from where an organisation or supply chain member needs to be. In truth, if flow down requirements from your client and similar their client(s) companies, are being correctly applied then it could be argued that the higher level of regulatory knowledge is not going to be a requirement, especially for those working in nuclear. This is, however anything but the case.

Using EPL's experience and direct guidance on regulatory expectations supply chain members have been able to acquire a very different view and insight into how regulatory requirements affect what they might do and or might need to do in the future. At EPL, we know that any supply chain member(s) working on the complex high integrity programme aspects of infrastructure projects, such as nuclear, have hugely benefitted from a gaining high-level appreciation and of specific regulatory technical guides. In fact, we know that this has greatly helped, improving early selection and pre-qualification positions. Add to this the improved appreciation of safety and quality cultural expectations then supply chain members have been able to achieve higher levels of tender and qualification compliance, a must for any organisation wanting to succeed in nuclear and other related or adjacent sectors.

Here, EPL has provided tailored and standard forms of essential training and awareness workshops. These have been designed to consider the headline awareness needs relating to the Technical Assessment Guides (TAG's) more commonly featured in client tender document requirements, and featured of the Office for Nuclear Regulations (ONR's). EPL has also guided helping organisations and companies towards better understanding of how to navigate and gain value from the vast regulatory information contained on the ONR's web site. With this companies have been able to benefit be gaining a far better and more informed understanding of why specific requirements and expectations, including origins of, are set out in client tender and contract documentation sets.

Whilst we at EPL are not trying to make companies regulatory experts, from our experience, drawn from those who have already undertaken essentials workshop awareness training, we know that organisations and companies have improved their credibility level in the eyes of potential clients. In cases, we also know where companies have used this type of training for internal and other cultural change programmes, deemed necessary for them to succeed in the wider nuclear sector.



Landscape and market essentials

As a business rule of thumb, particularly the case for high integrity markets, we advocate, the importance of 'really understanding' the market, the sector and indeed the landscape. We also very much appreciate just how difficult, not to mention frustrating, time-consuming, and confusing, it can be trying to keep abreast of market developments and programmes.

This is very much the case for many if not all large-scale infrastructure investment programmes, such as HS2, Nuclear, Heathrow expansion, Cross Rail etc., to name but a few. Adding complexities relating to whether market(s) is/are wholly public or private sector, commercially funded, ventures does very much increase the challenge for most organisations and companies and regardless of size or, their exposure. At EPL we have long-recognised this, especially within high integrity and complex engineering sectors. With most strategic infrastructure programmes being long-term, often spanning a decade if not more, this can also be extremely time consuming and costly, especially for small cap-sized companies with limited resources and short terms order book lead times.

EPL has supported organisations and companies, in respect of landscape essentials knowledge, tailored overviews and insight material presentations and workshops. These have covered where the market position may be at, or heading, in terms of programme timelines. This, we know, is and remains particularly important when it comes to helping organisations and companies to strategically plan at both business and operational levels.

Whilst infrastructure and other major projects are invariably subject to political controls there are other aspects to be aware of. These include hugely challenging global conditions, market landscape changes along with other unforeseen circumstances, such as Covid-19. All impact programmes and market decisions variety of ways, in cases both dramatically and severely, across all levels.

With this in mind EPL's landscape awareness workshops have provided organisations and companies, alike, with an insight and overview in terms of where the market is, directions of travel and some considerations relating to demand profiles. In turn this has helped organisations and companies to understand potential and future routes to market(s) providing with views on: potential opportunity sources, pre-qualification positions, strategic planning and resource needs.

EPL has been able to deliver this level of awareness knowledge, directly and through other industry bodies such as the Nuclear Industry Association, National Skills Academy and other industry Advanced Research organisations.



Understanding plant operation and system structures

In a similar way in which know that understanding infrastructure markets is important, EPL holds similar views when it comes to plant and facility structures and components/equipment types to be found within these programmes.

EPL's has a meaningful level plant and facility knowledge, along with a good understanding of the wider Generic Design Assessment process. With this EPL has created simplified build-plant-system-to-component structures and maps. These have used basic spreadsheet work book formats to aid manipulation, searching and interpretation activities associate with high-level demand profiling.

From this EPL has been able to identify, at a simplified level, which system(s), in cases sub-systems, fit with typical nuclear facility. For example, this is in terms of major buildings for, such as: the Nuclear Island (NI), Turbine Hall/Island (TI), Balance of Nuclear Plant (BoP). With this basic level of awareness and understanding organisations and companies have been able to better target opportunities of potential interest and supply in areas of certain materials and or equipment/component types.

Whilst an appreciation of plant structures does provide an important level of learning and knowledge EPL does recognise that credible demand-based tools have been developed, by other leading national bodies, which provide complementary insights and at a greater level detail. EPL has supported and contributed to work undertaken to develop some of these demand-based profiling tools.

EPL has also provided an essential level of awareness knowledge, directly and/or through industry recognised bodies such as: the Nuclear Industry Association, National Skills Academy and other industry Advanced Research organisations.

Benefits derived from this level of learning have included organisation and companies establishing where routes to market potential could be and what early pre-qualification or other strategically important positioning work needs to be undertaken, by who and when.



Supply chain capability mapping - UK

EPL has a long-standing and credible appreciation of UK supply chains for major infrastructure programmes and projects, and across multiple sectors, including industrial, technology and defence. EPL has evolved and maintained databases which capture not just on organisation and company names but also on capabilities and experience. EPL has also added supplementary notes on existing market capabilities and on any potential or transferrable market skills, for growth and development purposes.

EPL is particularly aware of market developments, and the challenges relating to future cost levels and needs. Cost and affordability, as we, know are major drivers impacting most, if not all, infrastructure programme activities. In many sectors this is the subject of immense scrutiny and challenge, at root and branch level. Nuclear is a prime example of this, especially at the fission Gigawatt sized plant size. This effects not only for follow-on infrastructure programmes but also for next generation and new technology 'to-be' campaign builds, such as small modular, micro and advanced technologies along with evolving derivatives such as fusion.

EPL has recognised that many high integrity capable supply chain companies will invariably work across multiple markets and sectors. Here, PL holds the view that many working in nuclear fission-based environments would equally be at home in a future nuclear fusion development and commercialised programme activities. The mapping work undertaken by EPL, along with support emanating from plant operation and structural awareness learning, has assisted supply chain members to gain greater levels of opportunity awareness relating to demand profiling activities, regardless of technology types

EPL has, as part its wider support to market offering, has therefore maintained its industry databases and has continued to evolve them to ensure alignment with market and technology developments. These have been, and can be, used to assist organisations and companies on capability matching activities, with a focus on increasing realistically achievable UK content and added value, progressively over future programmes and technology deployments.



The international and wider market perspective

EPL undertakes periodic reviews of the wider global energy, specifically nuclear news and other organisational media outlets. EPL also attends regular industry outlook briefings and makes use of the publicly available material. This is for the purpose of tracking both domestic and wider global market activities from a potential export trade perspective. EPL purposely captures and summarises, at a headline level, key market intelligence information, on a regular basis, sharing aspects of this within dedicated collaborative information-based networks.

In specific 'regional' news cases, EPL has drawn on and captured in-depth levels of in-country knowledge relating to both capacity, plant/facility locations, operational and future infrastructure build plans. This helps to EPL maintain a wider perspective on global development, development and deployment growth against the background of domestic positions and plans.

Whilst the periods of infrastructure replacement and new build activities during the late 1980's, 1990's through to early 2000's, were one of relative inactivity, the decade from mid-2000 and onwards has seen a major shift global towards infrastructure construction and new technology development activities within the nuclear and across major economies who are advancing the use of nuclear technologies to match the rapidly growing domestic and wider industrial needs.

EPL has used researched information to support the training and awareness to act as a directional finder, and facilitator, for potential new export market openings.

This is one of a number of activities undertaken by EPL for the benefit of others (organisations, companies and people) wishing to develop and succeed with the UK's high integrity industrial and defence sectors.