



Centralised PQQ portal for UK Offshore Wind

A report for the Scottish Offshore Wind Energy Council

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Executive summary

We have engaged with buyers and suppliers and reviewed experience from other industries to arrive at recommendations for the use of a common PQQ process for the UK offshore wind industry. Our key findings are:

- Centralised PQQ portals are already a key part of the procurement process for some purchasers.
- Industry opinion varies on the value that centralised PQQ portals bring. The consensus from both suppliers and buyers is that their use is driven more by procurement process than genuine value-add. When used, their value to project-related work is at least as much as a supplier/ITT database as it is for actual pre-qualification.
- A standard industry wide PQQ process will significantly reduce administrative overhead for suppliers. The value to suppliers will be similar if it is a centrally managed software-based system or a simpler framework of standard questions. The value to the wider industry is potentially greater with the centrally managed option.
- A standard industry-wide PQQ process will not negate the use of further company-specific or project-specific quality assessment requirements when completing a tendering process. Suppliers need to be aware of this and be ready to accommodate.
- A standard industry wide PQQ process will not by itself improve the chances of suppliers gaining more work in the industry. There are gaps in other areas that are equally important if the UK supplier base is to grow, and local content targets met.
- We recommend that use of an industry wide PQQ process should be mandatory in order to ensure uptake and maximise value.

Key recommendations

We recommend two options to SOWEC which will address the challenge of reducing supplier overheads on PQQ admin:

- **Ambitious:** Create an industry funded PQQ system and supply chain database that is free at point of use. Make participation mandatory for anyone participating in the UK offshore industry at any level. Engage with stakeholders to find the right level of flexibility in the PQQ system – such as splitting questions between corporate level (core) and those that are more supply chain area specific. Acknowledge that individual purchasers will still have their own quality processes to adhere to and build this into the design.
- **Conservative:** Create a PQQ framework (including a standardised standard set of questions that is accepted by all purchasers in the industry. Although not centrally administered, this will at least enable suppliers to create a standard set of answers which they can easily re-use.

We strongly recommend that care is taken to align either route with the wider context of increased local content. We refer to the roles played by support bodies such as UKEF and F4OR, and other industry objectives such as a centralised supply chain database (which itself would be included in the “Ambitious” option). These initiatives are addressing barriers beyond the PQQ process which are just as crucial to enabling the industry’s ability to reach local content targets. A co-ordinated approach across all relevant areas will provide a cohesive long-term strategy that will help create a strong and sustainable Scottish/UK supply chain for the future.

1. Introduction

Established in 2019, SOWEC is a partnership between the Scottish public sector and the offshore wind industry to coordinate a Scotland-wide response to the UK Offshore Wind Sector Deal. The partnership aims to lead and support the industry, boost the local content of projects and increase jobs in line with the Sector Deal.

The council has five goals which are to:

- Deliver at least 8GW of offshore wind in Scottish waters by 2030.
- Develop a plan for offshore wind's contribution to achieving Scotland's climate change ambition of net-zero greenhouse gas emissions by 2045.
- Create a competitive, commercially attractive offshore wind sector in Scotland which can deliver both domestically and in the global offshore wind market, with a focus on project development, deeper water capability and innovative technology solutions.
- Work to increase local content in line with the ambitions set out in the UK Sector Deal, developing a sustainable, world-class supply chain in Scotland.
- Boost the number of offshore wind jobs in Scotland to more than 6,000; an increase of 75% on 2019 figures.

1.1. SOWEC work packages

SOWEC has commissioned BVG Associates to deliver a package of five workstreams related to the SOWEC goal of increasing local content and developing a world-class supply chain.

The purpose of this pre-qualification questionnaire (PQQ) work package was to analyse and recommend options regarding the creation of an offshore wind specific pre-qualification and accreditation process. The impact of such an initiative will be to simplify procurement pre-qualification for supply-chain businesses, increasing opportunities for them to succeed.

The PQQ is just one area of the tendering process where suppliers encounter barriers. To put the role of the PQQ process in context we have included relevant commentary on the wider tendering process.

2. Methodology

To undertake this work we have:

1. Engaged with enablers in both wind and other relevant sectors to establish best practice and possible transferrable solutions.
2. Engaged with ORE Catapult to understand its thinking with regard to this area, especially in the context of its Fit For Offshore Renewables (F4OR) programme and other relevant activities.

3. Arranged telephone interviews with a subset of key Scottish suppliers, buyers and potential solution providers (including Achilles, with its roots in Aberdeen) to hear their views and suggestions.
4. Developed the high level functional requirements of some potential solutions, describing their various strengths and weaknesses, and recommending the route forward.

3. The role of the PQQ

At present, each offshore wind farm developer and Tier 1 (T1) contractor uses their own distinct PQQ and associated quality system procedures to pre-qualify suppliers before they are eligible to submit commercial proposals for the supply of goods and services.

Completing a PQQ can be a significant undertaking – suppliers suggest that 1-2 person weeks is typical. Having to submit multiple PQQs, each with slightly different questions, therefore has a large impact on the often-limited resources of supply chain companies. It potentially limits the ability of supply chain companies to pursue all relevant contract opportunities.

The purpose of a PQQ is to identify suppliers which have the corporate capability, capacity, and competence to deliver services to the level of quality required by the buyer. A PQQ does not evaluate a supplier on their technical or commercial offering for a specific service – this is done via an invitation to tender (ITT) process.

At a minimum PQQs generally contain questions related to:

- Health and safety
- Finance
- Insurance
- Environment
- Quality
- Modern slavery, and
- Equality & diversity

They can also include:

- ISO certifications
- Project experience and references
- Project specific technical accreditations, and
- Project specific technical questions

Although quality requirements are essentially specific to individual buyers, it is certainly possible for specific industries to create a standardised PQQ that is acceptable for all relevant buyers.

Standardised PQQs use a fixed set of questions, often with a level of flexibility to accommodate buyer or project

specific requirements. Standardised PQQs offer the following potential benefits:

- Less overhead for both suppliers and buyers
- Higher level of quality in supplier submissions as they have more time to devote to just the one PQQ
- Third-party oversight and auditing if using the PQQ platform provider to independently verify the information provided by suppliers, and
- Centralised repository for all buyers, suppliers and ITTs.

And the following drawbacks:

- Buyers can feel that they compromise on their preferred quality processes, and
- Suppliers can feel that PQQs which also seek to capture technical ability can be too abstract, not allowing them the opportunity to highlight their unique selling points (USPs).

4. Supplier engagement

We engaged with a variety of UK suppliers (one based in London, the others based in Scotland).

The general themes portrayed by the suppliers are discussed below.

4.1. Role of a centralised PQQ portal

The suppliers all agreed that the time and resource required for completing a typical PQQ process was significant. While they would welcome anything which reduced this burden, it was generally not listed as a significant barrier to success.

Most of the suppliers had experience of using existing PQQ portals including Achilles. The general observation was that they subscribed because it was a route to gaining work. Either the buyer specifically required it, or the industry used it more generally so they needed to be on it to know about opportunities in the first place. While a central PQQ system offered the promise of reduced overhead, in practice this was seldom the case – either the PQQ system itself had onerous administrative requirements, or it was just one of several in use throughout the industry, including buyer's own PQQ systems.

In general, there was mild enthusiasm from the suppliers for a UK offshore wind PQQ portal. However, it was established that the eventual satisfaction with the portal would be based on the increase in work a company wins due to the portal. In some instances this view was inferred from dialogue, but some of the companies voiced this explicitly.

4.2. Further commentary

The discussions with the suppliers raised a number of key points on the wider tendering process which are helpful in putting the role of a centralised PQQ portal in context.

1. Lack of clarity and visibility during a tender

A common theme between some of the suppliers was that they are encouraged to bid for work following positive initial discussions with a buyer, but once the tender evaluation process is underway the communications drop to zero and they are left with no primary contact and no way to find out what is happening.

Relevance

A centralised PQQ system would not address this issue directly. It would form part of an overall streamlining and standardisation of the tendering process that would align the needs and expectations of both buyers and suppliers.

2. Meet the buyer days are not useful

Most of the suppliers noted that while direct engagement with developers and T1s is welcome, it seldom leads to direct opportunities.

This applies particularly to meet the buyer events, where there is considerable expectation built around the size of the opportunity that a new offshore wind project brings. Feedback was that such events rarely if ever result in direct business opportunities.

There is often a mismatch in expectations both in how quickly work can be secured, and the specific type of work that is needed. New suppliers often approach such events expecting a level of education to be provided in terms of identifying specific supply needs.

There is similar frustration associated with direct engagements with developers. The suppliers provided several examples where promising discussions with a developer quickly faded when they were passed on to the relevant T1 or Tier 2 (T2) buyer.

Relevance

A centralised PQQ portal is likely to contribute in a small way to the ongoing upskilling of suppliers in terms of their readiness to engage with larger buyers. If the PQQ solution incorporated an advertising portal then this would further address this gap as it would directly deal with one of the primary purposes of meet the buyer events.

3. Local content is not a primary driver

All suppliers noted that, to varying degrees, their experience is that the driver of maximising local content is in practice a low priority and not a distinguishing factor when the lower tier contracts are being awarded.

Relevance

A mandated, centralised PQQ portal will provide benefit to developers by ensuring all relevant local suppliers are registered. If a local supplier is registered and pre-qualified then they will at least be on the long list to supply a project. The real change in this area will not come from a PQQ system, it would only come from a change in policy to one that mandates a particular level of local content or area of local supply. The PQQ system could help in enabling such a policy.

4. Difficulty in gaining traction

All suppliers noted the difficulty in gaining traction with a buyer.

If a supplier has a compelling solution to a problem, the most effective route to securing a contract is generally:

- a) Engage with the project at an engineering level
- b) Convince the project of the need to buy the service/solution
- c) Secure a “champion” within the project team who will both guide you through the steps to become a qualified supplier and who will ensure the buyer’s side of that qualification process is also managed correctly, and
- d) Once qualified and the work secured, do that work well.

The above process takes considerable investment of time and resource. One supplier emphasised the need to “go all in”. They had to risk the viability of their entire business to secure an opportunity with a major buyer.

Once a supplier has proven their capabilities on one project, they will significantly improve their chances of securing work on other projects.

Relevance

A centralised PQQ portal is likely to contribute in a small way to the ongoing upskilling of suppliers in terms of their readiness to engage with larger buyers. If the PQQ solution incorporated an advertising portal then this would further formalise the engagement process for suppliers. For the industry as a whole this should be a positive move, but it may be seen as a negative by some suppliers if they rely on face-to-face engagement to build relationships and procure opportunities.

5. Difficulty in finding the right point of contact

Associated with point 4, all the suppliers noted that the factor most likely to bring success was finding the right person in the buyer to engage with.

They are most likely to find this person by putting in the hours building relationships with the key stakeholders of the projects.

Relevance

Similar to point 4, a PQQ system which incorporates an advertising portal will formalise this process. This will streamline the buyers’ process but presents both pros and cons to suppliers.

6. Use of brokers hinders progress

Most of the suppliers highlighted that a large part of their frustration with the tendering process was the tendency for T1 buyers to use brokers. This puts an extra layer of administration on the process and the supplier, limits visibility of selection process, and crucially stops the supplier from forming a direct engagement with the buyer.

Relevance

A centralised PQQ process with an incorporated advertising portal should in theory minimise or completely remove the need for brokers.

7. Significant risk and liabilities

A common theme across the suppliers is that the level of risk and liability they are asked to accommodate is too great. An associated problem is that the size of contracts themselves are often stretching them beyond their capabilities and both suppliers and the buyers may choose to drop the contracts due to corporate risk perception.

Relevance

The PQQ process often requires statements or commitments on underwriting. There is an opportunity here for the industry to take a more holistic approach to this issue by incorporating aspects of T&Cs, PQQs and external support such as UKEF (see Section 6.2).

8. Size disparity is a problem

Associated with point 7, the suppliers observed that a large part of the problem associated with securing new business is the often-significant difference in size between the two parties. The larger buyers have corporate processes and contractual expectations that are at best at odds with how the smaller suppliers work, and at worst so overbearing that the suppliers are forced to drop out of the process.

Relevance

A standardised PQQ process will at least set the same level of requirements for all suppliers regardless of which buyer they are engaging with. The general issue needs to be addressed through a combination of more flexible contracting and further education of suppliers.

5. Buyer engagement

We engaged with a variety of developers and T1 suppliers. The general themes portrayed by the buyers are discussed below.

5.1. Role of a centralised PQQ portal

All the buyers were familiar with existing PQQ portals including Achilles, EPIM JQS and ISNetwork. Some of the buyers use them as an integral part of their corporate process.

The key priority for all the buyers was to secure the right suppliers for the job. The use or otherwise of a central PQQ portal is a decision made at a corporate level by their procurement department.

There were various opinions on the effectiveness or value of existing PQQ portals. There was general agreement that they were useful for identifying new suppliers in new functional or geographical areas and that they used it primarily as a supplier database. Mostly, the view of the pre-qualification part of any portal was that it was at best a minor help when screening for potential suppliers. All of the buyers implemented their own quality and approval processes regardless of whether a PQQ portal was a key part of their procurement process.

5.2. Further commentary

The discussions with the buyers raised a number of key points on the wider tendering process which are helpful in putting the role of a centralised PQQ portal in context.

1. Developers rely on their T1 suppliers to maximise local content

Developers are guided by the frameworks in which they operate. In the UK there is an emphasis on maximising local content and it is our experience that developers take this seriously. They do however rely on their T1 suppliers to engage with this objective. The T1 suppliers need to have sufficient flexibility in their own supply chain structures to make this a reality.

The number of T1 contracts issued on a per-project basis differs between developers. Some go for two or three primary contracts while others go for a multi-contract approach, securing between 10 to 20 primary contracts. The multi-contract approach provides a developer with greater flexibility and is generally seen as the lower cost route.

When a project's local content can benefit from using a particular supplier, developers can, and do, by-pass their T1 contracts and directly contract with the supplier in question. This increases the risk on the developer as well as introducing more administrative overhead, so this approach is likely to be attractive only where there is a big effect on the local content of a project.

Relevance

A centralised PQQ portal should provide benefit to the developer in this process:

- The supplier will by definition be pre-qualified, thus saving the developer time and effort guiding them through that process, and
- The supplier database part of the portal may identify new suppliers to them.

2. Tier 1 suppliers already have well-established supply chains

While it is possible for new suppliers to leverage political or project specific requirements to contract directly with a developer, it is more likely that a new supplier will have to contract with a T1 or T2.

T1 or T2 buyers tend to divide their services into "direct" and "indirect" services. Direct services are core to their offering and are typically supported by well-developed and often global supply chains, the key components of a turbine being a good example. Indirect services are more project-specific and can often be locally sourced, underwater welding or painting of steel jackets being just two examples.

Gaining access to the supply chain of a T1 for direct services likely requires a different route to that of the indirect services.

Relevance

A centralised PQQ portal is unlikely to bring benefit to the T1 for direct services, but should provide benefit for the indirect services:

- The supplier will by definition be pre-qualified, thus saving the T1 time and effort guiding them through that process.
- The supplier database part of the portal may identify new suppliers to them.

3. Education of lower-tier suppliers is key

Regardless of how a new supplier engages with a buyer, a consistent theme from all the buyers was that new entrants to the offshore wind supply chain often need education in terms of understanding, and being ready for, the needs of buyers.

There were three primary areas where this perceived lack of readiness was most obvious:

- Health and safety requirements
- Understanding of, and ability to work with, large corporate procurement teams, and
- Defining what problem the supplier is proposing to solve. Too many suppliers approach buyers with an expectation of being told what it is they need to supply.

Relevance

A centralised PQQ portal by itself will not address this issue, though the process of getting pre-qualified will bring some upskilling to the suppliers and the PQQ process could capture suppliers' education levels in these areas.

4. Supply chain is intellectual property

Buyers spend a lot of effort on establishing their supply chains. They see this as part of their intellectual property and, crucially, see it as a key differentiator between them and their competitors.

Relevance

A centralised PQQ portal has the potential to reduce the perceived value of buyer-specific supply chains and quality processes and so is likely to be met with resistance by some buyers.

It is unclear how significant this problem is in practice, as hard-won relationships will exist with or without a PQQ portal. Further, it is the potential additional functions of supply chain database and ITT portal that are likely to affect this, not the PQQ part itself.

We believe it IS important to highlight this concern as a possible barrier, while noting that there may be practical routes to minimise the issue.

5. Meet-the-buyer events are misunderstood

Associated with point 3, a consistent message from the buyers was the purpose of meet-the-buyer events are often misunderstood by suppliers. There is a perception that suppliers approach these events with high expectation of finding work and are disappointed or put off when it becomes apparent that it is only the first step in a potentially lengthy journey to establish themselves as a qualified supplier.

Relevance

A centralised PQQ portal is likely to contribute in a small way to the ongoing upskilling of suppliers in terms of their readiness to engage with larger buyers. It should be easy to address this misunderstanding in other ways.

6. Building and proving competence are key features that buyers demand from suppliers

All buyers emphasised the need for their suppliers to prove their competence and build confidence. They realise that this sets the barrier quite high for new entrants.

The buyers all recommend that suppliers that are new to the industry find ways to build experience, such as partnering or sub-contracting with other more established suppliers.

Relevance

A centralised PQQ portal is unlikely to address this barrier unless it included some form of framework designed to help bring new entrants up to speed via small parts of larger contracts.

6. Wider engagement

We engaged with other relevant stakeholders from the wider offshore wind community and from other industries.

6.1. Fit for Offshore Renewables

Fit for Offshore Renewables (F4OR) is an ORE Catapult service to help the UK supply chain get ready to bid for work in the offshore renewable energy sector. It is based on the successful Fit4Nuclear framework.

It is there to support a specific type of business to win more work in offshore wind. The companies it can support may be already active in the industry or may be transitioning from other sectors such as oil and gas.

The process to get certified as "Fit for Offshore" requires the following steps:

1. The company undertakes a self-assessment
2. This is followed by an audit by F4OR
3. This creates a gap analysis and a development plan to address, and
4. The final audit approves (or not) the certification.

A duration of 12 to 18 months is typical, and the onus is on the company to drive change

The first cohort comprised 15 companies in the "New Anglia" region. These are expected to complete the process this year. There are 10 places available for a North East England cohort that is currently being selected and F4OR is targeting 20 to 30 places for a North East Scotland cohort later this year.

Funding comes from a variety of places, including regional and industry bodies.

Choosing a cohort for a round of certification is based on a number of considerations, including:

- expressions of interest
- level of buy-in
- geography (funding can be localised)
- level of self-assessment
- current level of competence (the F4OR programme is looking to bridge the gap between 75% and 85% competence)
- relevance of technology (e.g. not hotels), and
- level of funding available.

It is not easy to gain certification. Experience from the first cohort showed a drop-out rate of 50%.

The purpose of engaging with F4OR on this project was to present the role it plays in the wider context of the supply chain. The F4OR project has significant backing from industry and is targeted at addressing some of the perceived gaps described elsewhere in this report. It is not directly related to a centralised PQQ portal but we recommend that both should be considered key parts of a more holistic approach to building a sustainable UK supply chain.

6.2. UK Government

We spoke to two government departments:

- UK Export Finance (UKEF), and
- Department for business, energy and industrial strategy (BEIS).

UKEF's role is to provide financial guarantees to UK companies when contracting outside of the UK, noting that the work itself could be done in the UK while the buyer has to be registered outside the UK. This function is targeted at smaller companies required to provide a level of financial security that their assets cannot sustain. There is no minimum level at which support can be granted, but in practice a company needs to have a turnover of at least £6-7M for the banks to be interested.

We consider that UKEF could play a key role in helping mitigate some of the discrepancies regarding company size and contractual risk that have been highlighted elsewhere. Although not directly related to a centralised PQQ system, this function may help address some of the barriers within the PQQ system where suppliers have to provide evidence of underwriting.

Through the Sector Deal, BEIS has set a target of 60% local content. Up to now this has been entirely voluntary as reflected in some of the concerns voiced by the suppliers. If the industry is not seen to be progressing towards this target, BEIS does have the power to bring in mandatory requirements and this could include a centralise PQQ portal if it believed it was justified.

BEIS is aware of the problems encountered by the UK supply chain, some of which are reflected in this report. It is also aware that the idea of transferable pre-qualification is practised successfully elsewhere, such as in France where qualification as a supplier on one project automatically qualifies you to work on other projects, regardless of owner.

The Pathfinder¹ initiative currently being implemented by the Oil and Gas Authority in the UK is also being followed with interest.

6.3. Oil and gas

Where suppliers had experience of both the oil and gas (O&G) and offshore wind industries, the general consensus was that offshore wind is trailing O&G by at least 15 years in terms of streamlined practices and general collaboration, such as in the use or otherwise of a central PQQ system.

The UK O&G industry has relied quite heavily on the FPAL/Achilles² PQQ solution over the last 10-15 years. Feedback from the engagement process indicated that satisfaction with the solution was high for a while as it successfully addressed a lot of the problems highlighted elsewhere in this report but has started to wane in recent years. The industry is beginning to look at alternatives that are more suited to its needs such as the Pathfinder project mentioned above.

The reason for the drop in satisfaction includes:

- Use of it was not compulsory across the industry. Other solutions have appeared which some see as more agile and better addressing industry needs
- Subscription seen as a “tick box” requirement for suppliers rather than genuine value-add
- Lack of business opportunities made subscription fees harder to justify
- Data maintenance became as big a barrier for subscribers as subscription fees, thus negating a key benefit of such a system
- Lack of maintenance and development of the software has reduced user satisfaction, and
- Increasingly used as an expensive supplier directory rather than a PQQ portal.

Achilles operates other networking platforms in other geographies, such as JQS in the Nordics. There are barriers to extending existing platforms across geographies and industries, such as:

- Local drivers do not always translate globally
- There is a desire to avoid cross-sector “pollution” (too many non-relevant players), and
- Product classifications (such as UNSPC³) may not reflect requirements of specific industries/geographies.

¹ Oil and Gas Authority, 2021, Available online at: <https://www.ogauthority.co.uk/supply-chain/oil-gas-pathfinder-previously-project-pathfinder/>.

² FPAL – First Point Assessment – is the framework, Achilles is the platform.

³ UNSPSC, 2021, Available online at: <https://www.unspsc.org/>.

Achilles believes that most of these barriers can be overcome or mitigated through design adjustments, and changes to the subscription model can be made to reflect better value to both buyer and supplier.

6.4. Nuclear

The nuclear industry is highly regulated. Procurement in the nuclear sector entails a mixture of public and private procurement activities.

While these characteristics differentiate nuclear from the offshore wind industry, there are still many similarities between the two industries. Both develop and operate large energy infrastructure, relying on a diverse range of suppliers in construction, engineering, and manufacturing. Both industries have local content goals, and crucially are a part of a competitive global market for equipment and services.

The general procurement steps for a nuclear project are similar to those for an offshore wind project, including the requirement to run a PQQ process. Procurement portals are prevalent in the nuclear industry but there is no standard portal which is used. For public procurements, Official Journal of European Union (OJEU), Complete Tender Management (CTM), and UK devolved nations public tendering portals are used.

PQQ processes are non-standard in the nuclear industry, with questions and requirements for a PQQ changing from buyer to buyer and project to project, therefore creating the same issue for suppliers as is being discussed here.

Alliance contracting

Although not directly related to PQQ processes, use of alliance contracting methods has been able to achieve good engagement with local suppliers and SMEs^{4,5} and so is worth mentioning here as part of the wider context of supply chain engagement.

6.5. Construction

PAS-91 (Publicly Available Specification 91) was created by the UK Government and British Standards Institution. Its purpose is to provide a standard series of questions for pre-qualification, streamlining the pre-qualification process, and ultimately reducing resources spent during procurement for construction projects.

PAS 91 was originally introduced in 2013 and has been periodically updated since. PAS-91 comprises:

- Mandatory questions related to basic company information and commercial aspects of a company
- Optional questions related to certain company policy areas such as environmental management, quality management, policies on equal opportunities and diversity, and policies on building information modelling (BIM), and
- A framework for asking project-specific questions, that are used to establish professional or technical ability.

This structure ensures that PAS-91 is prescriptive rather than prescriptive, allowing buyers to tailor the PQQ to their specific project's needs.

PAS-91 has been targeted at construction projects, and specifically onshore construction. It is unlikely that direct application of PAS-91 to all areas of an offshore wind projects is possible. For onshore construction works such as the construction of operational facilities and onshore substations, however, it is reasonable to expect that PAS-91 could be directly applied. This has the benefit that many contractors who are likely to be used for onshore works may already have experience of PAS-91 from other business areas.

We found evidence of PAS-91 being used for onshore wind farm projects. Octopus Renewable Infrastructure Trust (ORIT) uses "a pre-qualification questionnaire process based on PAS-91" for any potential contractors. The purpose of this is to provide proper due-diligence and benchmarking for any contractors used on an ORIT project, ultimately giving investor confidence.⁶

Investor confidence is another key benefit of a standardised PQQ process for the buyers. Utilisation of a standardised PQQ process not only reduces time and cost spent vetting potential contractors but also reduces the risk that the PQQ process itself will be ineffective resulting in a buyer being accused of any negligence when selecting a supplier.

The PAS-91 is not an example of full procurement system and is not integrated with any particular portal or supplier database. It is however a light-weight solution to one of the primary challenges faced by suppliers in offshore wind

⁴ When alliance contracting was introduced by Sellafeld on its Decommissioning Delivery Partnership (DDP) framework, spend on SMEs rose from 20% to 34% between 2016 to 2019.

⁵ UK Government, 2019, Available online at: <https://www.gov.uk/government/news/decommissioning-delivery-partnership-celebrates-3-years-of-delivery>.

⁶ Octopus Renewables, Impact Strategy, 2020. Available online at: [Octopus Renewable Infrastructure Trust Impact Strategy 2020](https://www.octopusrenewables.com/impact-strategy-2020).

industry, that of changing PQQ standards and the resources required to adapt to different PQQ processes.

6.6. European Single Procurement Document

The European Single Procurement Document (ESPD) was created by the European Commission with the intention of standardising public sector procurement across the EU. The ESPD contains questions related to “preliminary evidence in the form of self-declaration concerning exclusion criteria (e.g. criminal convictions, grave professional misconduct) and selection criteria (financial, economic and technical capacity)”⁷.

Member states operate their own online procurement platform which are used to store supplier information and advertise public procurement opportunities. Buyers select which questions from the ESPD are relevant and specify evaluation criteria. Suppliers can manually complete the ESPD online, or have the form automatically completed if their supplier information is already stored on the national procurement portal.

Public Contracts Scotland (PCS) Tender portal is the national eTender system for Scotland and utilises the standard ESPD templates.

PCS has published case studies from both buyers and suppliers on their experience of using the PCS system⁸. In these case studies the standardised PQQ process is highlighted as being the primary benefit for suppliers, saving them time when preparing bids.

Although successful, the use of ESPD for public procurement in Scotland circumvents two challenges facing online supply chain portals for UK offshore wind:

- Governments can centrally manage public procurement and mandate that all procurement must be carried out through the portal, ensuring uptake amongst the supply chain. To achieve uptake of such a system in UK offshore would require buy-in from multiple, often competing, parties.
- Governments can utilise public funds to fund the procurement portal, meaning that local governments and suppliers can access the portal free at the point of use. For such a system to work in the UK offshore would require private funding from buyers and/or suppliers which could be a barrier to uptake.

6.7. Summary of wider engagement

The challenges experienced by suppliers, namely the uncertainty surrounding PQQ processes and the resources required to complete PQQs, are not unique to the offshore wind industry. Initiatives in both public and private sectors have attempted to implement solutions to alleviate these challenges.

Standardised PQQs, such as PAS-91 or FPAL, have the potential to streamline the process for both buyers and suppliers. Without a mandate to use a particular solution, however, the effectiveness of having a centralised process is significantly reduced. It is the experience from other industries that while a particular solution may hold sway for a period, it is inevitable that in a free market other options, including buyer’s own systems, will dilute the process and so reduce the value to the industry overall.

Fully integrated procurement systems, such as public procurement systems based on ESPD, mitigate most of the challenges that buyer and suppliers face during procurement processes. By simplifying the pre-qualification process, storing basic information for repeated use, allowing sellers to focus on project specific information, and acting as a central place for all suppliers and all tendering opportunities.

Although such systems work well, the difficulty arises when attempting to implement such a system in the private sector. A successful central procurement system in the private sector would require agreement of the process by multiple, competing organisations. It would also require agreement on how the system is funded. Unlike for public procurement, any such procurement system would also be subject to competition and could therefore be vulnerable to fragmentation of the market unless carefully structured and suppliers would again be faced with a variety of PQQ systems to contend with.

Alliance contracting approaches, although not directly targeted towards solving procurement challenges, do enable buyers such as T1 suppliers to work more effectively together in areas such as procurement, and can simplify and streamline pre-qualification.

7. General summary

The key messages from industry review and engagement process presented above are summarised below.

⁷ EUR-Lex, review of the practical application of the European Single Procurement Document (ESPD) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52017DC0242>.

⁸Public Tender Scotland, 2021. Available online at: <https://www.publictendersscotland.publiccontractsscotland.gov.uk/esop/pts-host/public/pts/web/case-studies.html>

7.1. PQQ portal

A new industry wide PQQ portal would:

- reduce supplier overhead
- be welcomed by suppliers provided that it didn't disadvantage them, and
- be used by buyers provided the industry mandated it.

It would not by itself:

- avoid further in-house quality checks and processes by the buyers
- bridge the skills/readiness gap between (some) suppliers and the buyers
- make it more likely for suppliers to win more work, or
- ensure more local content.

For maximum effectiveness, the industry should seek to mandate use of a single solution.

7.2. Supply chain databases

One of the key reasons buyers currently use central PQQ systems is to connect with new suppliers in a geography where they have yet to build their own approved supply chain. Similarly, where suppliers are most favourable towards a central PQQ system is when it is used to enter a new industry or geography.

From this perspective, the central PQQ system is an expensive and over-engineered supply chain/opportunity database.

It is worth considering if an effective way of starting down the route to creating a central PQQ portal is to first create a central UK-wide supplier database. Registration could be made compulsory for all companies wishing to enter into any contract (either as buyer or as supplier) on a UK offshore wind project.

As the offshore wind market globalises, however, limitations of solutions based on a single country also grow. It is one thing for a supplier to save time using a central PQQ system in one market, but if each market imposes a system, then suppliers supplying to the same buyer can end up having to do extra work in order to supply to that buyer in different markets.

7.3. Further commentary

The industry engagement raised several key points on the wider tendering process which are helpful in putting the role of a centralised PQQ portal in context.

UK offshore wind vs other industries

For suppliers who have experience of both the UK O&G and the UK offshore wind industries, their general observation is that offshore wind is:

- Less mature
- Less collaborative
- Less streamlined, and
- Less transparent.

Their observation is that offshore wind often appears to be a "closed shop", with contracts going to suppliers who have existing relationships with buyers. This hinders new entrants and disadvantages the long-term interest of the industry in general.

It is important to note that the developers and T1s that we spoke to strongly disagree with this view. It is their position that their global reach and experience from other industries have brought quality improvements and cost reductions that have enabled significant advances in project delivery. Perceived barriers to entry into that ecosystem are simply the result of the high thresholds required to ensure consistency. An associated observation is that new entrants to the supply chain suffer most from a lack of familiarity with buyer's processes and more generally with the industry as a whole. There are gaps in key areas such as level of expectation, contractual risk, and on articulating what problem their service or product is addressing.

The challenge for the industry is to find ways to bridge these gaps, allowing easier entry into the supply chain while ensuring cost and quality on delivery. This will require progress on both fronts – education and upskilling for suppliers, more collaboration and flexibility from buyers. A more cohesive industry-wide view on the PQQ process is a key part of that challenge.

Local content

There was general consensus on the two main messages regarding local content:

1. Local content needs to be mandated in some way if targets are to be achieved, and
2. No supplier has an expectation of getting work based purely on geography, but they should have an expectation of being given a fair chance.

A centralised PQQ portal would go some way to providing a framework through which these principles can be applied and monitored.

Effective offshore wind supply chain entry

Regardless of whether a central PQQ process is in place or not, the supply chain can significantly enhance their chances of gaining traction by following these guidelines:

- Be clear about your offering and what problem you solve
- Understand the procurement process
- Find a champion in the company you are targeting

- PQQs are a key part of the process and you must be prepared to put in the effort

8. Potential solutions

Here we present several potential solutions to implementing an industry wide PQQ system.

These solutions are aimed at alleviating the challenges experienced by the supply chain and increasing the representation of Scottish companies in offshore wind projects.

Five potential solutions are described and are listed below in descending order of ambition:

1. Industry-funded UK portal
2. Widespread use of an existing supply chain portal
3. Standardised offshore wind PQQ
4. Standardised project PQQs, and
5. UK supplier and buyer database.

A description is given for each of the solutions, outlining the key characteristics of the solution and how it may work in practice. Consideration has been given to the benefits and drawbacks for both suppliers and buyers of each solution, and the practicality of implementing it.

8.1. Industry funded UK portal

It is proposed that a central offshore wind supply chain portal is adopted for projects in the UK. This solution represents the ideal scenario for the UK supply chain and has the highest level of ambition.

The key characteristics of the central offshore wind supply chain portal are:

- The central supply chain portal will be used to post all tendering opportunities for an offshore wind project
- Suppliers must be registered on this portal to be eligible to bid for contracts on offshore wind projects
- Suppliers will pre-qualify on the system once; pre-qualification information will be stored and can be re-used for future bids
- Suppliers will be obligated to keep their information up to date
- The procurement portal will use an industry accepted pre-qualification standard, which will include financial checks and QHSE audits
- Use of the system will be mandated, and
- Use of the system will be free at point of use for suppliers and buyers.

Such a system has the following benefits and drawbacks:

- ✓ Suppliers need only complete pre-qualification once, with minimal resources required to maintain up to date information
- ✓ Suppliers are guaranteed to have access to all tendering opportunities
- ✓ Buyers reduce their own pre-qualification resources as the supply chain portals pre-qualification standard is trusted and relied upon
- ✓ Buyers do not need to use and pay for multiple procurement portals to advertise project opportunities and find suppliers as they will all be available on the central system
- ✗ May be difficult for buyers to agree upon standard pre-qualification criteria
- ✗ Independent auditing of suppliers likely expensive.
- ✗ Obligation to use the system may be challenged
- ✗ A new system for just the UK may be regarded as adding more admin overhead for suppliers who work in multiple regions
- ✗ Increased competition for currently successful suppliers may not be wanted, and
- ✗ Buyers with strong local supply chain knowledge may see this as devaluing their proposition and not want this knowledge to be shared with competitors.

For the system to be successful, it is important that the central procurement portal is operated by an independent party with the means to mandate use of the system for all Scottish (or UK) projects, and with the means to make the system free at the point of use, while still being able to fund potentially expensive auditing activities.

The Crown Estate and Crown Estate Scotland are organisations which match these criteria, have funds available from seabed lease payments, and the ability to obligate projects to use the portal in their conditions of lease.

It is recommended that the qualification criteria and auditing process for the pre-qualification standard is defined by a committee of experts and agreed upon by all major offshore wind buyers including developers and T1s, for example via OWIC and SOWEC.

The implementation of this standard would be carried out by a number of private companies who are certified practitioners of the standard. These practitioners would compete competitively for certification work.

This central supply chain portal would ensure buyers and suppliers had full visibility on all available tendering opportunities and would streamline the process of tendering for work as all suppliers registered on the portal would be pre-qualified.

The upfront and ongoing costs to operate this system would be significant. This proposition could however make effective use of revenues generated from seabed lease payments, and ultimately increase value for project developers and the businesses and communities local to the seabed lease areas.

8.2. Widespread use of an existing supply chain portal

To achieve many of the same benefits of a central, mandated supply chain portal without some of the implementation difficulties, use of an existing supply chain portal such as FPAL/Achilles⁹ could be encouraged.

The key characteristics of existing supply chain portals are:

- Suppliers pre-qualify on the portal once; pre-qualification information is stored and can be re-used for future bids
- Suppliers are obligated to keep their information up to date
- The operator of the supply chain portal manages the auditing of suppliers on the portal
- Buyers trust the qualifying standards and auditing standard of the supply chain portal operator
- Use of the system by both suppliers and buyers incurs a fee
- The system can be industry agnostic, and can be used for procurement in multiple industries including oil and gas and offshore renewables

Such a system has the following benefits and drawbacks:

- ✓ Suppliers need only complete pre-qualification once, reducing on-going resource to that required to keep information up to date on system
- ✓ Buyers are able to include questions beyond the standard set
- ✓ Buyers reduce their own pre-qualification resources as the portals pre-qualification standards are trusted and relied upon
- ✓ System does not need to be limited to UK market
- ✗ Potentially expensive for both buyers and suppliers. This could be a particular obstacle for SMEs in Scotland
- ✗ No obligation to use any particular system, therefore there could be fragmentation. Buyers and suppliers

may have to be registered with multiple supply chain portals to find opportunities.

The use of existing supply chain portals in theory should reduce the burden on suppliers and buyers when pre-qualifying for project opportunities. However, our engagement with the industry showed that the capabilities of these systems are not consistently utilised. Some buyers may use the system as a supplier database only, some may take advantage of certain pre-qualification checks such as financial checks, whereas other may accept registration on a supply chain portal as pre-qualification.

This partial use of supply chain portals can sometimes be a hindrance rather than a benefit to suppliers, as suppliers need to spend resources to be registered on the supply chain portal and additional resources to complete buyer-specific pre-qualification assessment.

In this scenario we assume that use of the system is recommended rather than mandated. Without the ability to mandate use of a particular supply chain portal, practical implementation of the system is at risk of fragmentation. Different supply chain portal operators would compete on costs and quality of pre-qualification assessment, resulting in a patchwork of supply chain portals which buyers and suppliers must spend resources maintaining.

We would recommend investigating routes ensuring some level of monopoly in order to minimise this downside.

8.3. Standardised offshore wind PQQ

The third solution focuses on the PQQ itself. As discussed elsewhere in this report, many of the questions within a PQQ are generic, whilst some relate to a company's capability in a particular technical area.

It is proposed that a standard PQQ is created for use on all offshore wind projects. This standard PQQ would include:

- A mandatory set of general questions related to:
 - Health and safety
 - Finance
 - Insurance
 - Environment
 - Quality
 - Criminal history
 - Modern slavery
 - Equality & diversity, and

⁹ Note that we are not proposing FPAL/Achilles as the preferred option. We use it only as an example, and one that is possibly most familiar to stakeholders in the industry. We would strongly

recommend that a full tender and procurement process is followed to identify the appropriate solution for the industry.

- ISO certifications
- An optional suite of questions for specific technical supply chain areas. Supply chain areas would be defined using an industry standard taxonomy e.g. [Guide to an offshore wind farm](#)
- Guidelines on project specific questions, and
- Guidelines on scoring criteria.

When a buyer is tendering for work, they would create a PQQ which combines the general mandatory questions, with a selection of technical competency questions, such as questions specific to cable installation, for example, and will use the guidelines to add any relevant project-specific questions.

Such a system has the following benefits and drawbacks:

- ✓ Reduces resources required to complete PQQ for suppliers; suppliers can re-use most of PQQ in future bids knowing scoring criteria will not change
- ✓ Reduces resources for buyers when producing and scoring PQQs
- ✓ Allows buyers to manage procurement independent of any third-party system
- ✗ Requires key buyers (developers and T1s) to agree on pre-qualifying standard
- ✗ A governing body (coalition of key stakeholders) will need to maintain the PQQ to ensure it remains fit for purpose as the industry develops
- ✗ No clear way to mandate use of the PQQ, reducing potential uptake
- ✗ Only partially reduces supplier PQQ workload
- ✗ Does not increase visibility of project opportunities for SMEs in local supply chains

Compared to the first two solutions, an industry standard PQQ is a more lightweight system to implement. Although this system still requires co-operation, the level of cost will be significantly less as there is unlikely to be a major software solution required – just a written framework and best practice guidelines.

A governing body, such as a coalition of key stakeholders, will need to maintain the PQQ to ensure it remains fit for purpose as the industry develops.

A standard PQQ would solve the core issue for suppliers, alleviating the resources required to pre-qualify, and should enable improved quality of responses.

The addition of a suite of competency questions for specific supply chain areas will allow buyers to be more specific in pre-qualifying requirements and will allow suppliers to demonstrate their technical capability more easily, removing the possibility of being rejected due to more generalised or irrelevant questions.

For example, in certain supply chain areas, experience specifically in offshore wind may not be essential, and for these areas evidence of competence in other sectors such as oil and gas may be considered suitable.

A standard PQQ does not help buyers have more visibility of the supply chain, nor suppliers of opportunities.

8.4. Standardised project PQQ

Implementation of standardised project PQQs is the simplest and least ambitious of the solutions proposed. This takes the idea of the industry-wide solution described in Section 8.3 but applies it only to within individual projects.

This consistent pre-qualification process can be implemented regardless of the contracting strategy used, although there may be further advantages if used in conjunction with an alliance contracting model.

Such a system has the following benefits and drawbacks:

- ✓ For a given project suppliers need to pre-qualify once, knowing it will be accepted by all the buyers in the project
- ✓ Suppliers understand the pre-qualification process and how to become a registered supplier regardless of what company within the project they will ultimately contract with
- ✗ Requires major parties (developers and T1s) within a project to agree on pre-qualification process, just for one project
- ✗ Pre-qualification process could still change from project to project, so suppliers will still have to spend resources adapting responses

Standardising pre-qualification processes across a project will have limited impact on suppliers, but it is the simplest of the solutions to implement. It also allows developers to take more control over the pre-qualification process and adapt it to meet project specific objectives, such as local content requirements.

8.5. National supplier database

During engagement, many respondents shared that their primary use of supply chain portals was to find potential suppliers. Pre-qualification processes would then be carried out using a mixture of checks using third party tools and internal PQQs.

It is proposed that a national (Scottish or UK) database of suppliers be established to streamline the process of finding suppliers, and for finding project opportunities.

This supply chain database would be very similar to the “Industry funded UK portal” discussed in Section 8.1 but would exclude the pre-qualification and auditing features. The database would act as an authoritative repository for

all companies and project opportunities but would leave pre-qualification of suppliers to the buyers themselves.

A national supply chain database would:

- Provide a single central online database containing all companies within the supply chain, listing both developers and suppliers
- Include basic contact information, with services categorised into a recognised supply chain taxonomy e.g. [Guide to an offshore wind farm](#)
- Include information on current projects and any contracting opportunities available, acknowledging that concerns on commercially sensitive timescales and commitments will need to be accommodated
- Provide a history of who worked on what projects
- For each project, the database would include the details of T1 suppliers, and details on how to become a registered supplier to that company
- Be audited periodically by an independent third party to ensure the data remained valid. This audit would be small in scope, such as removing companies no longer trading, validating supply chain categorisations, etc.
- Would provide access free at the point of use for both buyers and suppliers.

Such a system has the following benefits and drawbacks:

- ✓ Suppliers have full visibility of available opportunities, and details of how to become a registered supplier
- ✓ Buyers can quickly and easily identify potential suppliers to their projects.
- ✗ Pre-qualification processes continue to be carried out independently by buyers, resulting in inconsistencies and inefficiency for suppliers.
- ✗ Danger of filling up with poor data if quality processes and data cleansing not prioritised.

Similar to the central procurement portal, this system would be best implemented by an independent party with the means to mandate use of the database and make the system free at the point of use.

Organisations which have an interest in building local supply chains, such as The Crown Estate, Crown Estate Scotland, Scottish Enterprise, and BEIS, are potential candidates for operating the system. We recommend that any solution should be applied UK-wide to avoid further fragmentation.

Local and National supply chain databases have been attempted in the past, with limited success. A key drawback of previous attempts has been the quality of the information. Often supply chain databases fall into disrepair due to lack of maintenance, and insufficient care taken to ensure validity of data being entered.

A key feature of the proposed supply chain database is that on-going validation of the data would take place by a knowledgeable independent body.

A national supply chain database can be used in combination with either of two preceding solutions (Industry standard PQQ, Project standard PQQ), to create a more streamlined, non-cumbersome, pre-qualification process.

9. Conclusions

The conclusions from this work package are:

- Centralised PQQ portals are already a key part of the procurement process for some buyers.
 - Opinion varies on the value that centralised PQQ portals bring. The general consensus is that their use is driven more by procurement process than genuine value-add.
 - When used, their value to project-related work is at least as much as a supplier/ITT database as it is for actual PQQ.
 - A one-stop PQQ will significantly reduce administrative overhead for suppliers.
 - Getting a one-stop PQQ to a level where there are no further quality checks are required by buyers has significant barriers in terms of cost to administer and effort to find common agreement.
 - A successful centralised PQQ portal will not by itself improve the chances of suppliers gaining more work in the industry. There is a wider context of education and risk mitigation to be addressed, such as:
 - The UKEF has an important role to play in helping to support smaller companies overcome limiting contractual burdens on financial securities.
 - The Fit4OffshoreRenewables programme has an important role in narrowing the gap of expectations between buyers and the lower tier suppliers.
 - Collaborative working practices such as alliance contracting structures potentially have a role in helping smaller supplier gain access to bigger contracts.
- We have two recommendations for SOWEC regarding the route forward to a centralised PQQ system:
- **Ambitious:** Create an industry funded PQQ system incorporating advertising portal and supply chain database that is free at point of use. Make participation mandatory for anyone participating in the UK offshore industry at any level. Engage with stakeholders to find the right level of flexibility in the PQQ system, such as splitting questions between corporate level (core) and those that are more supply chain area specific.

Acknowledge that individual buyers will still have their own quality processes to adhere to and build this into the design.

- **Conservative:** Create a PQQ framework that is accepted by all buyers in the industry. This framework would consist of a standard set of questions that are accepted at all levels throughout the industry as sufficient for pre-qualifying a supplier. Although not centrally administered, this will at least enable suppliers to create a standard set of answers which they can easily re-use

If either the Conservative option or neither option is chosen, we would strongly recommend that an industry wide supply chain database is created and its use mandated. By “mandated” we mean that any company working in UK offshore wind in any capacity, including all non-UK companies, must be registered on it. Although it may prove useful for buyer trying to find suppliers, its primary use would be for the benefit of the industry as a whole. It will enable stakeholders like SOWEC, CES, BEIS, etc. to have a complete and centralised view of the entire supply chain. It should be industry funded and free at point of use and should be designed to have minimal overheads.

Regardless of whether the Ambitious or Conservative option is taken, we further recommend that SOWEC look to also address some of the wider issues identified in this report as part of a thorough and holistic program focussed on developing a Scottish, and by extension UK, supply chain that is not only better prepared for immediate needs but is supported and driven by a long-term vision of excellence.