



**NUCLEAR AMRC**  
ADVANCED MANUFACTURING RESEARCH CENTRE

# F4N

## Fit For Nuclear

# Guidance for the F4N online assessment

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## Guidance for online assessment

*f4n.namrc.co.uk*

The Fit For Nuclear (F4N) programme is designed to help UK manufacturing companies measure their current operations against the standards required to supply the civil nuclear industry; and take the necessary steps to enter the market in new build, operations and decommissioning.

F4N has been developed by the Nuclear AMRC with support from our top-tier industrial members.

The F4N diagnostic will identify any gaps in your company's operations in terms of meeting the standards expected by the reactor vendors and their supply chain partners in key areas of business operation and performance.

This document lists the information you must provide and the questions you must answer to complete the online F4N assessment. It is intended to help you prepare to fill out the online assessment and keep track of your responses.

We recommend that you print and use this document to prepare your answers before taking the online assessment.

### **Nuclear capability questionnaire**

You will first be asked to provide some background details about your company's activities and performance. This will help us understand how we can best support your business. You must complete this questionnaire before you can access the full F4N assessment.

### **The F4N assessment**

Your F4N advisor will then give you access to the full online assessment. You will be asked to provide information about your company's operations and performance in six categories. In each category, you will see a series of topics with multiple-choice responses – for each topic, simply select the statement that best describes your company.

Your company directors and senior managers will need to agree with the submission and participate in the follow-up activity. The categories covered in the questionnaire are wide ranging, and will require input from all functions in your company to ensure that the responses give an accurate picture of your current capabilities.

## **Your data**

The business information you provide in response to the online questionnaire will be held securely.

Operational and performance data will only be used by the Nuclear AMRC and delivery partners for the purpose of your company's participation in the F4N programme.

The Nuclear AMRC may use your contact details to approach you about relevant activities and initiatives (programmes, projects, events, training opportunities, etc).

Once you have completed the F4N programme, the Nuclear AMRC may also share your contact details with businesses (for example, industrial members of the Nuclear AMRC board) which are seeking suppliers for the UK new build or decommissioning programme.

Before proceeding with the online assessment, you will be asked to accept data sharing terms and conditions, as detailed on the F4N online tool ([f4n.namrc.co.uk](http://f4n.namrc.co.uk)).

If you have any queries regarding the F4N programme, please email [f4n@namrc.co.uk](mailto:f4n@namrc.co.uk)

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# Nuclear capability questionnaire

## Background information

Company:

- Name
- Registration number
- Ownership
- Website
- Definition
- Local Enterprise Partnership (LEP)
- Previous nuclear experience?

Registered trading address

Assessment address

Contact person:

- Name
- Email
- Position
- Telephone

Collaborative or strategic alliances

## Performance

Turnover

- Percentage of turnover from export
- Turnover in-year forecast
- Percent of in-year forecast from export
- EBIT (as percentage of turnover: <0; 0–5%; 5–10%; >10%)

Employment

- Number of direct employees
- Number of indirect employees

For the following topics, we can accept data in a range of metrics – please use whichever measure you use internally.

Profitability (choice of metrics)

- Gross profit for last financial year
- Net profit for last financial year
- Gross profit margin
- Net profit margin
- Other

Gearing (choice of metrics)

- Debt shareholder funds
- Stockturn
- Other

Safety (choice of metrics)

- Number of RIDDOR reported incidents in last year
- Number of lost time accidents in last year
- Number of days since last lost time accident
- Number of H&S training days in last year
- % of H&S audits completed

Quality (choice of metrics)

- Number of customer complaints in last year
- % internal scrap in last year
- Rework in last year
- Cost of quality in last year
- Number of major non-conformances raised in last year
- Number of minor non-conformances raised in last year
- Number of internal audits completed last year
- Other

Delivery (choice of metrics)

- % OTIF (on time in full) last year
- Number of deliveries missed in last year
- Delivery schedule achievement % last year
- Project on-time completion %
- Other

People (choice of metrics)

- Productivity added value per employee
- Absence percent
- Training spend per employee per annum
- Staff turnover percent
- Other

## Products

Capability (select relevant areas)

- Material supplier
- Instrumentation & control equipment
- Pressure vessels, heat exchangers & tanks
- Pipework systems & seals
- Enclosures
- Testing & inspection
- Precision machining
- Steel fabrications
- Light and medium fabrications
- Heavy fabrications
- Heating & ventilation
- Castings
- Forgings
- Fasteners
- Mechanical handling & cranes
- Coatings & treatments (inc heat treatment)
- Bearings, seals & drives
- Pumps & valves
- Power & data supply
- Workshop equipment
- Other

Suppliers (list)

Do you manufacture a product in the UK?

UK products and services (list)

Products and services manufactured outside the UK

Customers (list)

Registered client portals (list)

Supplier contacts (list)

Codes and standards (list)

Maintain continuous improvement plan?

Accreditations (list)

Additional supporting information

## Final checklist

Are you happy for us to share your data with our partners and stakeholders?

Have you received public funding in the previous two financial years?

Are you receiving *de minimis* aid in the current financial year?

## The F4N assessment

### Nuclear safety & quality culture

The overriding priority of the nuclear power industry is to maintain safety and cause zero harm. This means safety not only for today and tomorrow, but for future generations. To achieve these safety standards, the industry insists on a shared culture of rigour and discipline.

Any company wanting to enter or compete in the civil nuclear supply chain needs to create a company culture of quality, safety and rigour in process and procedures.

Always remember: a quality issue for a supplier may later become a safety issue for a nuclear power plant.

### Best practice

Many UK manufacturers already deploy best practice in many areas of design, manufacturing, and assembly. Based on the expectations of the nuclear industry's top tier, best practice can be summarised as follows:

- Safety first – a culture that starts in the foyer and extends to the loading bay.
- Process assurance, giving confidence in repeatability of output and quality.
- Product qualification and quality assurance.
- Configuration control, such as manufacturing routing and design controls.
- Materials and supply chain management, for conformity and traceability.
- Consumables control, for conformity and potential traceability.
- Change management, covering design, product, materials, consumables, process, etc.
- Open culture and leadership, encouraging process ownership and responsibility.
- Learning culture – consistently aiming for continuous improvements through structured methods such as lean, Six Sigma and lessons learned, coupled with informal activity such as staff-led initiatives.

Please see below the sections for the portal based self-assessment.

Please pick from the four statements that which most closely resembles where you are.

Below each section are notes about our expectations for the verification visit, and what evidence we might expect to see, to help you determine where you are.

The online self-assessment is best done with more than one person, and as a robust critical view of the business.

# 1. Strategy and leadership

*“We are looking for organisations to have a fully developed strategic plan that has identified nuclear as a growth requirement, and has their strategic plan available for discussion at verification.”*

This section is to establish if the organisation has a strategic vision & deployed strategic plan. We also wish to assess the leadership engagement in any change programme.

## **Strategic plan:**

- No business plans exist. The organisation is run with a focus on today.
- The organisation does not have a clearly defined strategy. It is managed through an annual operating plan and budget.
- The organisation has defined its vision and values and developed a strategy. A deployment system is needed to cascade objectives to front line employees.
- The organisation’s SLT has defined its vision and values. It has developed a strategy that has been formally deployed and cascades to front line employees.

*We are looking for organisations to have a fully developed strategic plan that has identified nuclear as a growth requirement, and has their strategic plan available for discussion at verification.*

## **Management vision:**

- Management are focused on short-term goals.
- The vision and strategy is owned and controlled by the Managing Director.
- The vision and strategy are owned by the SLT, but there is a need to involve other employees.
- The vision and strategy are owned by the SLT, who have developed plans and involve their employees to support the strategic plans.

*We are looking for organisations to have a fully developed vision that has identified nuclear as a growth requirement, and has their vision and mission statement available for discussion at verification.*

## **Strategic awareness:**

- There is no strategic business planning experience within the organisation.
- The Managing Director has strategic business planning experience.
- Some of the SLT have experience of strategic business planning techniques. Strategic plans are being developed by the SLT.
- The management team have been trained and adopted strategic business planning, eg strategy deployment, and succession planning techniques. They are fully involved in the organisation’s strategic planning processes.

*We are looking to identify that the SLT have the training/skills and experience to develop a formal business strategy, and the extent to which they have been involved in the strategic planning process. We will want to discuss this during the verification visit.*

## **Strategy deployment:**

- Communications of strategy are mainly on a need to know basis.
- Communication of strategy through the organisation rests with one individual.
- Communication of the strategy/vision to all employees rests with the SLT.
- The strategic plan has been deployed to all areas in the organisation. All employees have objectives that support the strategic plan.

*We are looking for the extent that your strategic deployment process engages people in the organisation and we would like to see the deployment documents and how this is deployed and reviewed.*



**Strategic reviews:**

- No formal reviews of the strategic plan or performance take place.
- No formal strategic reviews are carried out. The management process is by regular review of operating performance and budgets.
- There is a formal management process to review progress against the strategy.
- There is a formal process, eg an away day, to regularly review progress against the strategic objectives at all levels of the organisation.

*We are looking at how the strategy is reviewed, who is involved and the frequency, and we would expect to discuss the process and to see any supporting documents at verification.*

**Leading change:**

- A traditional management style exists. Management do not see the need for change.
- Few of the SLT show commitment to continuous development.
- Most of the SLT see the need for change and the continuous development of the organisation. Some employees are involved in business improvement.
- All of the SLT see the need for change and the continuous development of the organisation. They involve all employees in improvement activities.

*We are looking to establish the extent to which the SLT involve employees in a Continuous Sustainable Improvement Programmes (CSIP) and to see who is involved in leading improvement programmes and how these programmes link to the organisation's strategic goals.*

**Visible leadership:**

- Employees work to SLT instructions. Coaching and support for employee development does not take place.
- A few of the SLT provide coaching and support for the development of employees.
- Most of the SLT are approachable and visible, providing coaching for employees to develop and deliver goals and objectives.
- All of the SLT are approachable and visible, providing coaching for employees to develop and deliver goals and objectives.

*In support of leading change, we are looking at the SLT capability and the impact they have through coaching of their employees to achieve goals and objectives, and to establish how leaders are developed and how the plans and activities are currently being undertaken.*

**Roles and responsibilities:**

- Leadership roles and responsibilities are not defined.
- Leadership roles and responsibilities are not clearly defined.
- All the SLT have clearly defined roles and responsibilities.
- All managers have clearly defined roles and responsibilities including the need for Continuous Improvement (CI). They see the need for people involvement, and leading change is evidenced by all management promoting a performance culture.

*We are looking to assess how well the leadership roles and responsibilities are defined throughout the organisation, it is useful to see examples of written documents at verification.*

**Leadership development:**

- Leadership training is not generally given and these skills are developed on the job.
- Some leadership development has been given. This has generally been done to meet a specific need or request.
- Leadership development is seen as important to the organisation's success, but is generally when appointments or promotions are made.
- All managers have been formally appraised and have personal development plans linked to the organisation strategy and objectives. Leadership development is seen as key to business improvement and training is given to meet the strategic goals.

*We would expect to review the leadership development process and how leaders are appraised and developed, and whether there are any skills gaps and weaknesses. We would like to see development plans and appraisal documents to support the verification discussion.*

**Communication:**

- Leaders rarely communicate to employees.
- Many of the leaders in the organisation see communications as a need to know activity and respond accordingly.
- All managers see the need for effective communications and they have a system for providing business and performance information to all employees, but communications tend to be top down with limited employee contribution and feedback.
- All managers see the need for effective communications and they have a system that is visible, providing business and performance information for all employees. Communications are effective with good employee contribution and feedback.

*We are looking at how the organisation communicates key business information to its employees and if employees are engaged. We would like to review the communication process at verification and its effectiveness and establish how employees contribute and feedback.*

## 2. Design and project management

*“The organisation has a proactive approach to design/specification and project management. The organisation has the infrastructure and processes to deliver high value projects to its customers to budget, quality, and on time. The organisation sees the need to review projects as a means to improvement and becoming a learning organisation.”*

Not all organisations will have a design element. Some organisations work to customer design/specification to provide products and services; this design requirement will be acknowledged during the assessment.

### **Design/specification systems:**

- Solely work to physical customer design/specification to provide products and services.
- The organisation can interpret electronic customer design/specification to provide products and services.
- Basic electronic packages are used to produce internal design/specifications.
- High level electronic packages are used for full design/specification.

*We are looking to establish the type of design that is undertaken (if any) and what systems are deployed. We would look for the organisation to comment re the design system and requirement and show any supporting designs and documents to support the submission at verification.*

### **Design/specification capability:**

- The organisation does not have a design/specification capability. They require instructions for producing products/services, and/or they build to print.
- The organisation requires their customer to design/specify components and or products/services. They have the capability to do small designs/specifications to assist the customer, with revision control.
- The organisation can interface on concept designs/specifications. They normally have designs/specifications defined and work to detailed instructions from their customer.
- The organisation has a capability to take concept design/specification requirements and translate these into mainstream products/services with arrangement and detail designs/specifications that meet customer requirements.

*We are looking to establish if the organisation has the design capability to meet the requirements of customers and where applicable the client. A discussion/presentation is required to explain the design capability and examples of how this capability is deployed and utilised. (As applicable).*

### **Design/specification FMEA:**

- The organisation does not understand this concept, or their customer does not require it.
- Design/specification FMEAs are required and controlled by the customer. The organisation understands the need but have not yet introduced this process.
- The organisation understands design/specification FMEA and has some generic capability that they are developing. Some generic design/specification FMEAs have been introduced.
- The organisation understands and is proactive in using design/specification FMEA for their customer. There is a formal process to assess new designs/specifications to reduce risk.

*There is a requirement to establish how well risk is managed as part of the design/specification process (If applicable). We are looking to establish how the organisation manages risk in the design/specification process and if design/specification FMEA is understood and utilised. At verification we would wish to see examples of design/specification FMEA's and have a discussion of how these have been deployed.*

**Design for Manufacture (DFM):**

- The organisation undertakes limited DFM but not as a recognised documented process. DFM is not a recognised or understood concept in the organisation.
- DFM is a process that some people in the organisation understand. There is no documented process evident at present.
- DFM is a concept that the organisation understands. They are developing a process to formalise/document/record this concept.
- DFM is a concept that the organisation fully understands. They have a documented process and a team that looks to design/specify cost/quality/ease of developing product/service benefits into the process. This is well established.

*DFM is a process that looks to influence cost and quality at the design stage through cross-functional group activity. At verification, we are looking at the extent to which the organisation deploys this process and how the product/service costs, quality, and ease of developing products/services are improving as a result.*

**Design/specification control:**

- Little design/specification process control exists. No trackable drawing/specification change control system.
- The design/specification process lacks a formal system of control. Drawings/specification are tracked informally, change control is inadequate.
- There is a good design/specification control process in place which captures change control and ensures correct drawing/specification issue in use throughout the organisation.
- The design/specification control process is in full control of drawings/specifications and changes to designs/specifications. Change control is linked to production of products/services control for recall etc, plus a closed loop for drawing/specification change requests.

*Depending on the design/specification requirement, we are looking to review the system and process for controlling design/ specification and design/specification changes. We would like to discuss the systems used. At verification, a written procedure or process diagram/ flow chart would also be beneficial to explain what is done.*

**Project Management - from tender on:**

- At tender stage, resources/constraints are not considered.
- Projects are often managed reactively without considering the resource/constraints or discussing cross-functionally.
- Resources/constraints are normally identified with documented cross-functional discussion/involvement. Preliminary project plans exist on some large projects.
- Resources/constraints are always identified with documented cross-functional discussion/involvement. Preliminary project plans are always developed.

*Depending on the nature of the organisation & of the projects, there is a need to allocate resources & define the leadership & structure. At verification we would like to see the process of how programmes are resourced, how resources are identified & how the programmes are set up & managed to fully understand tender requirements.*

**Project definition and objectives:**

- No project objectives. Improvement needed. Objectives and goals are rarely defined.
- Project objective setting is inconsistent. Risk is managed reactively.
- Project objectives are usually defined. Scale of project is considered. Risk is usually managed, and there is a formal process for this. Benefits are not always defined.
- Project objectives are always clearly defined. Risk is always managed and there is a formal process. Benefits are clearly defined. Generics are used for runners/repeaters.

*Project objectives need to be effectively defined to meet demanding deadlines. We would like to see the process, & examples of project plans to support the submission at verification.*

**Project planning, quality and cost control, and integration - into organisation work plan:**

- Improvement needed. Objectives and goals are not clear.
- Project planning is not formal, but it exists in the form of generic activities management for runners/repeaters.
- Detail work plans and schedules exist and are effectively managed. Quality/costs and resource management could improve. Critical path analysis is not used.
- Detail work plans and schedules exist and are effectively managed. Quality/costs and resources are effectively managed to budgets. Critical path analysis is used.

*Projects need to have detailed work plans with quality/cost in control. At verification we would like to see examples of live projects & how quality/costs & the project OTIF reviewed.*

**Risk management and project security:**

- Project control is not a strength of the organisation.
- Project control is not cross-functionally managed. Risk management needs introducing to manage project activity. Risks are not identified & the organisation is reactive.
- Project planning exists using simple systems (MS Excel/Gantt). Reviews are carried out but reporting and communication could be improved.
- A formal planning system integrated with MRP/ERP is used for project management and controlling risk as defined by the design/specification FMEA. Formal cross-functional project reviews are undertaken with progress reports communicated. You may be reviewing ISO 27001.

*Depending on the nature & size of your projects there is a need to have a formal managed system to manage the activities & a process to establish & manage risk. We would like to discuss the process & the systems you use & see how risk is managed (risk registers if applicable e.g.) at verification.*

**Project closure and review:**

- There is no formal close out process, or Learning From Experience (LFE).
- There is a simple close out process, usually by an individual, but no LFE.
- There is a process and work plans for closing out a project. A post implementation report is usually circulated. There is limited LFE.
- There is a formal cross-functional documented process and work plans for closing out a project. A post implementation report is circulated. Lessons learnt are used to improve the process, performance, and knowledge base.

*Projects need to be reviewed to learn by cross-functional teams. All parties need to be involved (allowing for project scale), and the results documented, and recorded into gateways. At verification, we wish to see the process for project closure & review to see how lessons learnt are applied back to future project activity.*

### 3. People excellence

*“Employees are seen as providing a competitive advantage to the organisation. They have total involvement, are fully aware of the organisation’s vision and goals and their development is central to the strategic aims of the organisation.”*

This section is to establish how much employees are involved and the extent to which they contribute to driving the organisation forward.

#### **Employee commitment:**

- Employees are generally unaware of the strategic aims and values of the organisation.
- Employees have been told about the organisation’s strategy and values but do not understand their role in delivering the plan. Employee commitment is low.
- All employees are aware of the organisation’s strategy and values and some have demonstrated commitment through their actions and contributions.
- All employees are aware of the organisation’s strategy and values and have demonstrated commitment through their actions. Significant change is evident through employee led initiatives and continuous improvement activity.

*We are looking for employees to be fully up to speed with where the organisation is going and evidence of pro-active delivery of the organisation’s vision, which is central to long-term organisation success.*

#### **Employee objectives:**

- The benefits of deploying employee targets and goals are not fully utilised by management and no employee targets or goals are set.
- There is some awareness of the need to set employee targets and goals, but no system is in place to develop and manage these.
- There is no formal strategy deployment system. Some employees have targets and goals, but these are not fully driven and linked to the organisation’s strategy.
- There is a strategy deployment system that cascades targets and objectives to employees. Performance is measured at all levels as part of the formal strategic process.

*We are looking to establish whether employees have targets and goals from the organisation’s plan. At verification we would like to see how the process works and examples of employee targets and objectives and the contribution they are making.*

#### **Employee accountability:**

- Employees do not generally get involved in organisation improvement. Management do not see the benefit of total employee involvement.
- Continuous improvement activities are limited. They are normally management led, with all employees involved when requested.
- Formal continuous improvement groups exist in some areas. Some employees are proactive, generally the need to implement change is management driven.
- Formal continuous improvement groups exist and are driving a performance culture within the organisation. Employees are proactive in coming forward with ideas for improvement and are able to implement change from their contributions.

*We are looking at how employees contribute and take responsibility for delivering improvement. At verification we would like to see the process used to drive improvement and the extent to which employees participate. Examples of activity should be provided.*

**Employee culture:**

- Employees are not engaged. Morale is an issue.
- Employees are not engaged. Morale is generally satisfactory.
- Employees are engaged. Morale is generally good with most employees engaged and satisfied with their role and support from management.
- Employees are engaged. Morale is good with the vast majority of employees fully engaged and satisfied with their role and support from management. There is a formal recognition process led by management.

*Having a performance culture with total employee commitment is the ultimate goal. We would like to see at verification how the feeling and opinions of employees is established and used in the ongoing development of the organisation process. Employee surveys, if used should be presented.*

**Employee development:**

- Minimal employee training and development takes place.
- Some training and development takes place, but there is no formal review via appraisals.
- Some employees have appraisals leading to personal development plans linked to the organisation's objectives. Skills development is an important organisation priority.
- All employees have appraisals and personal development plans linked to the organisation's objectives. Skills and personal development is seen as an important organisation priority and is driven from the strategic plan and the appraisal system.

*Having fully qualified employees who are encouraged to continuously develop themselves to support the organisation's vision is what we are looking for. At verification we would like to see the employee development process along with examples of appraisals to all employees.*

**Employee records:**

- HR records are not kept.
- HR records are kept but not always accurate.
- HR records are kept to support employee personal development in most cases.
- HR records are kept to support all employee personal development plans and objectives.

HR records are required to support employee development. It would be useful to see an example of a live employee record on the verification day.

**Skills and competence:**

- There are skills gaps in key areas of the organisation and there is no clear plan to address this.
- The organisation trains employees to meet the organisation's needs. Some skills shortage exists but this is not affecting the day-to-day running of the organisation.
- The organisation has a skills assessment process linked to the organisation's needs. The organisation has competent people in most key areas. Some skills are required for the future, but at present the organisation is ok.
- The organisation has a skills assessment process linked to organisation and personal needs. The organisation has Suitably Qualified and Experienced Person (SQEP) employees in all key areas of the organisation. The process covers safety, quality and process requirements and is linked to employee appraisals

*Having the skills to meet the current and future organisation plan is key to long-term organisation success. We would like to see how the skills assessment process works to identify the skills required and any perceived gaps to meet the organisations strategic plan. Examples of succession plan or skills matrices, if these are used, should be presented at verification.*

**Ideas and suggestions:**

- Employees are not proactive at generating ideas.
- Employee ideas and suggestions are sought but with limited success. Managers are aware that there is a need to improve this process.
- There is a process that maximises employee ideas and contributions. This process is facilitated by line leadership and generates implementable suggestions from some employees. Most of the ideas are fully evaluated with some implemented.
- There is a process that maximises employee ideas and contributions. This process is facilitated by line leadership and generates implementable suggestions for all employees. All ideas are fully evaluated and some are implemented.

*Having a process to maximise employee ideas and suggestions is required as part of a drive to continuously improve. At verification we would like to see the process used and examples of ideas generated by employees as part of their role.*

**Communication:**

- Communications are poor or ineffective. Key information is not normally shared with employees.
- Communication is essentially one way and management driven. Employees are involved on a need to know basis.
- Communication is good throughout the organisation. Management tend to lead on this. There is some two-way feedback, but management are aware that this can be improved and there is a plan.
- Effective two-way communication is evident in the organisation. Employees are fully aware of organisation plans and organisation activities. The employee feedback process including group activities is proactive without management driving this.

*Providing employees with timely organisation information is key to employee engagement and contribution. At verification we would like to establish what the communication process is and what employees are told along with examples of briefings and other documents that are used.*

**Change and empowerment:**

- The organisation is traditional in its approach. Employees are given instructions. Little empowerment exists.
- Change is starting to happen in areas of the organisation. Management in general have clear plans to drive employee involvement.
- Some employees embrace change and are actively involved in improvement programmes and group activity. Management are driving employee involvement.
- Employees embrace change. All employees are actively involved in improvement programmes and group activity. Change is evident in all areas of the organisation.

*The rate of change in organisations today is significant. Counterfeit, Fraudulent and Suspect items (CFSI) and Modern Slavery are but a couple of current (2019) issues. We are looking for organisations who recognise this and are pro-actively involving all employees in addressing this. At verification we would like to see how the organisation addresses change and utilises employees to achieve this. Examples of change and the extent to which employees contribute is required. Your Continuous Sustainable Improvement Plan (CSIP) would be valuable.*



## 4. Process excellence

*“The organisation sees the need for continually improving their business operation. They have a formal strategy for process improvement across the organisation. They are proactive at driving efficiency up and cost down.”*

To address change and drive organisation competitiveness there is a need to have a formal improvement strategy and process. This section is looking to assess how pro-active you are and what processes are used to drive improvement.

### **Products and Services strategy:**

- There is no products and services strategy or Continuous Sustainable Improvement Plan (CSIP) plan for process improvement.
- The organisation is aware of process improvement principles and it has carried out some improvement projects.
- There is no formal products and services strategy, but some continuous improvement plans have been implemented for process improvement.
- The Senior Leadership Team (SLT) has developed a products and services strategy in order to achieve world-class performance. This strategy has extended to all areas of the organisation and is fully integrated as part of the organisation’s vision through strategy deployment.

*We would like to see you have a formal strategy that is deployed from and supporting the organisation’s strategy and Continuous Sustainable Improvement Plan (CSIP). This should include investment and ways to drive cost and productivity improvement. We would like to see a copy of the strategy along with a summary of the key drivers at verification.*

### **Value stream mapping/management:**

- Management is not aware of the value stream mapping/management assessment tools.
- The management understand the need for value stream mapping/management but have yet to plan for its introduction.
- Value stream mapping/management is understood and being introduced. A current state value stream map/process flow diagram has been developed for the main product by a CI team.
- Value stream mapping/management is evident. Product value streams have been identified along with the development of current state and future state maps. Improvement plans are being managed by the value stream mapping teams - CSIP.

*Lean techniques (including SMED (Single-Minute Exchange of Dies)) are proven to drive improvement in any organisation. Value stream mapping/process flow diagrams help planning lean improvements with current and future states identified. At verification, we would like to see how you plan for improvement, and review examples of value stream mapping/process flow diagrams if you have them.*

### **Performance measurement:**

- KPIs are not controlling the key processes. Data collection and problem solving are not used for organisation improvement.
- KPIs are understood but are only deployed in selected product/machine areas. Little visible performance measurement is evident. Reviews of performance tend to be informal and not recorded. Data is sometimes captured to solve specific problems.
- KPIs are developed for some key organisation metrics such as quality, cost, delivery, and safety. Data is captured and analysed, but documented improvement project plans are not evident.
- KPIs are developed for relevant key organisation metrics such as quality, cost, delivery, and safety. Data is captured and analysed as a basis for problem solving and continuous improvement. Improvement actions are normally implemented, documented, closed out, and trends monitored.

*One key element of driving efficiency and productivity is performance measurement and key performance indicators (KPI). We want to see this deployed and visible with front line employees fully*

*engaged. At verification we expect to see copies of KPI's, charts showing performance and, during the site tour, we will look for KPI visibility and how KPI's are used with employees to drive CSIP projects.*

**Process improvement training:**

- Process improvement benefits are not understood or part of the organisation's culture.
- Some process improvement training has been introduced, but is limited in scope and/or numbers of people.
- Most employees have been trained and demonstrate an understanding of process improvement methods. There are some champions for process improvement who have the responsibility to deliver this.
- All relevant employees have been trained and demonstrate an understanding of process improvement methods. All are champions for process improvement and are proactively driving the process forward with good achievements.

*To support a culture of continuous improvement employees need to be fully trained and engaged in the process. At verification we will look for what process improvement training has been carried out and planned and how this training has been effectively deployed and utilised.*

**5S workplace organisation:**

- 5S workplace organisation has not been implemented.
- 5S workplace organisation has been tried but not sustained.
- 5S workplace organisation is partially implemented and planned to be rolled out.
- 5S workplace organisation is fully implemented and is being controlled and sustained.

*5S workplace organisation is one of the key foundation processes for lean activities that works in any organisation, across all areas of the site. We require you to have a sustainable 5S process driving improvement as part of a CI strategy. At verification we will look to see how the 5S process has been introduced and sustained. Is there an audit?, by whom?*

**Standard work methods:**

- Standard work methods of control are not used.
- Standard work methods are being introduced.
- Standard work methods are used as a basis for organisation control and improvement in some areas.
- Standard work methods are used as a basis for training, quality control, problem solving and process control disciplines.

*Standard work is a process (Standard Operating Procedures – (SOP)) to set out what to do, how to do it, the checks to make for each work element. Standard work is required to ensure the products and services being produced conform to specification, quality and cost. At verification, we would wish to see live copies of standard work instructions during the site tour.*

**Planned maintenance:**

- No planned maintenance is carried out. Equipment is serviced when problems occur, reactive/breakdown led.
- Maintenance is carried out on most of the equipment. The activities are not scheduled as well as they could be.
- There is a process for routine planned maintenance on most of the equipment. The schedules are always maintained. Accurate records of equipment performance are kept. Suitably Qualified and Experienced Person (SQEP) employees deal with all planned maintenance activities.
- There is a process for routine planned maintenance on all equipment. The schedules are always maintained. Accurate records of equipment performance are kept. Operators are involved in asset care maintenance procedures.

*Equipment reliability is an essential part of being able to deliver on-time to ever more demanding schedules. At verification we would like to see how the process for equipment maintenance is managed, and copies of maintenance schedules and records kept. Eg who does PAT checks, coolant checks, tooling wear?*

**Communication:**

- Communications are not in place, other than on a need to know basis.
- Some communications exist, but generally one way. This is an area management know they need to address.
- A communication process exists. This promotes and reviews quality performance. This tends to be top down with limited 2-way communication. Management have identified this, and plans are being introduced to improve/encourage/facilitate feedback.
- A good communication process exists which involves town hall briefings, toolbox talks, continuous improvement groups, with visible quality performance data throughout the organisation. Feedback is effective with employees proactively engaging fully in the process. Your CSIP is clearly visible and is tracked/discussed.

*We are looking at how the organisation communicates key information to its employees and how engaged they are. At verification we would like to review the communication process and its effectiveness and establish how employees receive work instructions and communicate at plant level.*

**Supply chain management:**

- Supply chain partnerships are not seen as important.
- The importance of supply chain partnerships is being evaluated.
- The importance of supply chain partnerships has been recognised. Supply chain partners are being sought as part of the organisation's strategy.
- Key suppliers are aligned to the organisation with agreed improvement goals and objectives. The organisation is an approved supply chain partner to their major customers, and, where relevant, able to demonstrate CI activities at suppliers.

*Building strong relationships and delivering value through the supply chain is a key requirement. At verification we would like to see how the supply chain is managed and identify how many strategic supply partners you have.*

**Environmental management:**

- There is no environmental management system in place.
- Some limited environmental activity takes place such as recycling and waste management.
- The organisation has undertaken a gap analysis and has a plan to achieve ISO 14001 through a UKAS accredited awarding organisation or internationally accepted equivalent, as defined by the International Accreditation Forum (IAF).
- The organisation's environmental management system is certified to ISO 14001 through a UKAS accredited awarding organisation or internationally accepted equivalent, as defined by the International Accreditation Forum (IAF).

*Protection of the environment is something we all have to take responsibility for. ISO 14001 is often a pre-requisite of bidding, and we would like organisations to have, or be working towards this. At verification, we would expect to see a copy of your certification if you have it, or a plan that you are working towards if you are not certified.*

## 5. Health and safety culture

*“The development and sustainability of a health and safety culture is the organisation's top goal and is everyone's responsibility. The organisation has a proactive approach, is led by the Senior Leadership Team (SLT), and it demands everyone to demonstrate total commitment to safety without compromise.”*

Developing a health and safety culture is paramount in any industry especially nuclear. We will be looking to establish how pro-active you are and how the process is led and managed throughout the organisation. We would like to see organisations have, or be working towards achieving, certification to ISO 45001 through a UKAS accredited awarding organisation. Note: "UKAS" here is taken to mean "UKAS accredited awarding organisation or internationally accepted equivalent, as defined by the International Accreditation Forum (IAF)"

### **Policy and strategy:**

- No formal health and safety policy exists.
- Health and safety activities take place but there is no formal policy.
- There is a health and safety policy and established management system in place. The Organisation is actively working towards a formal certification to the ISO 45001 standard by an UKAS accredited awarding organisation.
- There is a health and safety policy and management system in place that is certified to the OHSAS18001 or ISO 45001 through a UKAS accredited awarding organisation.

*We expect organisations to have or be working towards ISO 45001 certification through a UKAS accredited awarding organisation. At verification we would like to see either a copy of the certificate or a plan with timescale you are working to achieve certification. Note: "UKAS" here is taken to mean "UKAS accredited awarding organisation or internationally accepted equivalent, as defined by the International Accreditation Forum (IAF)*

### **Senior Leadership Team commitment:**

- The SLT do not demonstrate an understanding or commitment to health and safety.
- The SLT react when health and safety problems arise.
- The SLT are involved in health and safety performance management.
- The SLT leads the health and safety process and are proactive in driving compliance and performance.

*The Senior Leadership Team (SLT) take responsibility for, and lead, the development of a pro-active safety culture. At verification we would like to see how the SLT is engaged, the direction they give, and how this is integrated into the SLT agendas and meetings.*

### **Targets, goals, and objectives:**

- There are no health and safety targets and monitoring systems.
- The need for health and safety targets has been identified but is not in place.
- There are health and safety targets in place, including near misses, and a formal management review takes place. A formal system for improvement is being developed.
- There are health and safety targets with a formal management review. A formal system for improvement is evident and driving safety performance through a Continuous Sustainable Improvement Plan (CSIP).

*To consistently drive for improvement in health and safety culture we would like to see objectives, goals and targets deployed and reviewed as part of the SLT activities and formal H & S process. At verification we would like you to show copies of the formal documents/KPIs used as part of the OHSAS 18001/ISO 45001 certified process that explains the specifics of your system.*

**Responsibility and accountability:**

- Safety is seen as a management responsibility. Employees are reminded of the importance of safety standards, but safety is managed reactively.
- Safety is seen as a management responsibility. Everyone in the organisation has been made aware of the importance of adhering to safety standards. Safety is managed reactively.
- Safety is seen as a collective responsibility, with everyone aware of the importance of adhering to safety standards. Safety performance is improving, but management have to constantly drive to achieve these safety standards.
- A culture of safety is a collective responsibility. Safety is put first when taking decisions. Everyone in the organisation understands the importance of adhering to safety standards and takes personal responsibility for safety throughout the organisation without compromise.

*Safety is a collective responsibility requiring everyone throughout the organisation to play their part and take personal responsibility for driving an H & S culture. At verification, we would like to see the process (toolbox talks) that engages employees in a challenging safety attitude/culture activities and, during the site tour; we will look for evidence that safety standards are, at least, maintained.*

**Competence:**

- Health and safety training is lacking in key areas of the organisation.
- Some training is given for health and safety, but most employees are not involved.
- Health and safety training is given and evaluated. Not all employees have had formal training, but this is planned for completion, and is in the CSIP.
- Health and safety training has been given to all employees. The effectiveness of the training is reviewed and evaluated. Employees are competent (SQEP – Suitably Qualified and Experienced Person) and involved in health and safety improvement activities.

*To achieve a health and safety culture all employees will need to be involved and well trained. They will have to have a clear understanding of the requirement, have the appropriate knowledge and skills and be kept informed of the progress you are making. At verification we will require you to show how the training has been developed and introduced, who has had training and how effective the training is (an explanation of how you review its effectiveness).*

**Safety culture:**

- Safety is managed to comply with legislation.
- Safety is managed to comply with legislation. Everyone in the organisation has been made aware of key safety objectives. Some employees raise concerns about safety.
- Safety is a top organisation priority. Everyone in the organisation has been made aware of key safety objectives. Employees raise concerns. Management act on the concerns and keep employees informed of progress. Management lead improvement activities with some key individuals.
- Safety is an overriding organisation priority. Everyone in the organisation understands this and is trusted to play their part. There is a questioning attitude to safety with concerns being raised without fear of retribution. Improvement ideas are always encouraged and acted upon.

*We require a safety culture that is not compromised, that is the top organisation goal that involves everyone in the organisation being pro-active and taking personal responsibility for delivering this culture. At verification we would like to see safety records, safety performance and, during the site tour we will look to identify areas of best practice.*

**Control and records:**

- Records are not well kept or are non-existent.
- Records are kept, but there are issues and non-conformance in some cases.
- Records are kept, and documents are usually in control.
- Records are kept, and documents are always in control without exception.

*It is important to have accurate records with timely close out of incidents and non-conformances. At verification we would like to see how the process works and examples of the records you keep including the status of non-conforming activities.*

**Business Continuity planning:**

- A business continuity plan is not in place.
- A business continuity plan is being considered.
- A business continuity plan is being drafted, and includes a major incidence plan.
- There is a tested business continuity plan in place, with the clear aim of maintaining supply after a major incident.

*We would like to see a business continuity plan as part of your management systems. During the verification we would like to see a copy of your plan, and to understand if you have “game played” it, have you hard copies?, a grab bag?*

**Audit:**

- No audit procedure exists.
- Health and safety audits are not always carried out to schedule or corrective action taken as required.
- There is a formal procedure for health and safety audit, and this is accurate and up to date. Management have to constantly push for conformance and compliance.
- There is a formal procedure for health and safety audit that is accurate and up to date, with complete records. Conformance and compliance are high with all issues addressed in a timely manner. There are visual indicators of audit.

*It is a requirement to audit the procedures and processes. We wish to see an audit schedule and be updated with the current status at verification.*

**Risk management:**

- Risk management is a concern with several examples assessed.
- Risk management assessments are carried out as instructed by management.
- Risk is managed proactively. There is a process for assessing risk. Most employees are involved in assessing risk for new products, services or processes. It is management led.
- Risk is managed proactively. There is a process for assessing risk. All employees are fully involved in assessing risk for new products, services or processes. It is employee led.

*Risk management is a key requirement in any health and safety process. At verification we would like to see how risk is managed, copies of any relevant documents such as risk assessments etc. We would like to see how employees are involved and the extent of this involvement, and that information is available at the point of use.*

## 6. Quality management

*“To develop, sustain and continuously improve quality is a top strategic goal. Building quality into the products and services and developing and sustaining a culture of continuous improvement is a key management imperative.”*

Building quality into your products and services and developing a culture of continuous improvement is what we are looking for as part of your quality management system.

### **Policy and strategy:**

- No quality policy exists.
- There is a quality policy but no certified quality system.
- There is a quality policy and the organisation has performed a gap analysis and is working towards ISO 9001 certification of its quality management system through a UKAS accredited awarding organisation.
- There is a quality policy and quality management system certified to ISO 9001 through a UKAS accredited awarding organisation.

*ISO 9001 certification through a UKAS accredited awarding organisation is required. At verification we wish to see a copy of your certification, and any NCRs (non conformance/conformity report) and evidence of how they were closed.*

*Note: "UKAS" here is taken to mean "UKAS accredited awarding organisation or internationally accepted equivalent, as defined by the International Accreditation Forum (IAF)".*

### **Management commitment:**

- The SLT are heavily involved in day-to-day activities, but quality systems are not always evident or clearly followed.
- The SLT have recognised the need to take a more systematic approach to quality improvement. A quality management system is being developed.
- Management have demonstrated a commitment to quality and defined responsibilities throughout the organisation.
- Management proactively lead the quality improvement strategy. They have demonstrated commitment to quality by developing a framework and providing resources to drive improved quality performance.

*Management will have defined, taken responsibility for, and provided the resources to support the Quality Management System (QMS). At verification we wish to review the QMS and the Senior Leadership Team (SLT) leadership and involvement.*

### **Quality plans:**

- There are no quality plans. Quality problems are addressed as and when they arise.
- Quality is managed with inspection ensuring quality standards are achieved.
- Some quality objectives have been agreed. Quality plans are used in some areas of the organisation.
- Quality objectives are established from the products and services strategy and are deployed to all areas of the business. Quality plans are operational throughout the organisation.

*Quality plans are needed to show how you will achieve the quality objectives along with the quality assurance processes that you have put in place to achieve the quality standards. At verification we expect to see how the quality planning process works and live examples of quality plans.*

**Responsibilities and accountability:**

- Responsibilities are not clear, and little documented improvement activity takes place. Corrective action is reactive, which has a negative impact on quality performance.
- Responsibility for quality is with a director or senior quality manager. Improvement activity tends to be reactive and involve a few key employees.
- Responsibilities for quality have been established and there is a senior manager responsible for the quality system and performance, which is reviewed at management level.
- The quality system is led by the SLT. They are proactive in quality matters and are briefed and updated on at least a monthly basis. They hold formal management reviews and provide support and resources to drive quality improvement.

*The responsibilities for quality will be defined by the Senior Leadership Team (SLT). There will be a senior manager responsible. At verification we would like to see the structure and responsibilities as defined in the quality manual and how the process works in your organisation.*

**Competence:**

- Training in quality is seen as a cost and only done when it is essential.
- Appropriate quality training is given as and when required. Competence checks are not generally carried out.
- Appropriate quality training is given, and its effectiveness is generally reviewed. Training is determined only by business needs and to meet any skills gaps. Appraisals and employee development are being planned.
- Quality training is deployed from the organisation's strategy to meet its development and improvement needs. There is an employee appraisal and development system in place to measure competence and identify the need for training and to record its effectiveness. Quality communication is effective and visible throughout the organisation.

*We are looking for Suitably Qualified and Experienced Persons (SQEP) to support the quality strategy. At verification we are looking for suitably qualified people, training to support the quality processes and how appraisal and reviews of the people and processes are carried out.*

**Process capability:**

- Process capability is not understood.
- Understanding process capability is recognised as a way to control and continuously improve product/service quality. No action has been taken to develop this approach.
- Process capability has been recognised as the way to control and continuously improve product/service quality. Some key equipment has defined process capability.
- Process capability has been established as the way to control and continuously improve product/service quality. All key equipment has defined processes.

*We are looking to establish how capable the processes are that meet customer requirements. Some producers of products and services, depending on volumes, have defined statistical process control capability studies. At verification we wish to review these charts if you use them, or to discuss the processes and understand the capability and quality levels of them if you do not. If you produce in low volumes, you might measure OTIF (on time in full), NCRs closed, suggestions, customer complaints, orders complete/delivered to establish how you meet customer requirements.*

**Documents and records:**

- A few records and documents are kept. There is need to improve the control of documents and records.
- Some records and documents are kept. There is need to improve the audit and control and ensure they are up to date.
- Records and documents are kept and are generally in control with an odd exception. NCRs are raised/documented.
- A certified quality management system is in place and fully compliant for the control of documents and records with clear evidence of NCRs being recorded/closed.

*The use of documents and record control is as defined in the ISO 9001 QMS. At verification we would like to see examples of the documents and records used and the management process defined in the QMS. What is your record retention process – method, how, length.*



**Traceability and non-conforming products:**

- There is no clear process for product/service traceability and management of non-conforming products/services.
- There is a process for product/service traceability and management of non-conforming products/services, however this process is rarely followed.
- There is a process for product/service traceability and management of non-conforming products/services, which is normally followed.
- There is a clearly defined process for product/service traceability, identifying counterfeit goods, and any other non-conformances, and which is followed without exception.

*Traceability and non-conforming products/services as defined in the ISO 9001 QMS. At verification, we would like to see how the process works and how material/product traceability is managed with examples, (CFSI (Counterfeit, Fraudulent and Suspect items), quarantine areas, identification of cross contamination, offcut control, WIP (work in progress), supplier verification, demonstrated during the site tour.*

**Audit:**

- No audit procedure exists.
- Audits are not always carried out to schedule.
- There is a formal procedure for audit that is accurate and up to date. Management have to constantly push for conformance.
- There is a formal procedure for audit that is accurate and up to date. Records are in control without exception. Employees are actively involved in quality management and improvement activities.

*It is a requirement to audit (this may be internal and/or external) the quality procedures and processes. At verification we wish to see an audit schedule and be updated with the current status.*

**Continuous improvement:**

- Firefighting tends to exist in the organisation.
- Improvement activity is usually reactive and incident driven. The SLT lead and involve employees as they see fit. Improvement trends are not showing tangible benefits.
- The organisation carries out continuous improvement activities. This is management led and involves key people in the organisation. The management have plans to roll this out across the organisation.
- The organisation has a formal continuous improvement process (eg Kaizen) and / or a formal continuous improvement group. The process operates organisation wide. It is employee driven, and addresses quality, cost, safety, and people performance. Improvement activity is communicated visually and there are positive trends.

*It is important to have a process for continuous improvement to drive improvements in quality, cost, on-time delivery performance and push for excellence. At verification, we would wish to see the process used for continuous improvement and the supporting documentation used. We will look for examples of visual control during the site visit.*

----- End of assessment -----