

# **Project Initiation and Business Cases Handbook**

## **Chapter 14**

### ***Quality Assurance***

**Contents:**

<b>Section</b>	<b>Subject</b>
1.	<a href="#"><u>Introduction</u></a>
2.	<a href="#"><u>Overview</u></a>
	<a href="#"><u>Annex A: Quality assurance Roles and responsibilities</u></a>

## Introduction

1.1. Public sector clients, responsible for major investment projects, must protect the safety of the communities they serve and put in place appropriate project wide quality assurance processes to confirm the safety of all users of their facilities.

1.2. This chapter provides contracting authorities with guidance on the planning and key activities required to establish the structures which will set a project up for success. It also reminds clients of the importance of embedding whole life-cycle quality assurance systems within their project delivery plan to provide confidence to senior leaders and stakeholders that their project will deliver its agreed objectives, achieve value for money and will be well designed and well-constructed.

## Overview

2.1. The role of the client is pivotal in determining the quality of a project both in terms of establishing and managing an effective project delivery process and ensuring the end product achieves the agreed design and 'as built' standards. Recommendation 1.1 of the [Report of the Independent Inquiry into the Construction of Edinburgh Schools, February 2017](#), emphasised that public sector bodies engaged in the procurement of facilities should maintain, or have assured access to the requisite level of expertise and (time and funding) resources that allows that body to act as an "intelligent customer" in undertaking transactions with Private Sector Construction Companies. The role of the "intelligent customer" is set out in Annex A.

2.2. To help contracting authorities assess their capability to deliver investment projects, the Scottish Futures Trust has developed the [Baseline Skillset for Construction Procurement](#). In addition, the Scottish Government has launched a [Construction Procurement Capability Assessment](#) tool, which enables clients to identify any skills and experience gaps which inhibit their ability to act as an "intelligent customer".

2.3. Construction Policy Note, [CPN 1-2017 Site inspection and assurance](#) states "Regardless of the procurement strategy it is incumbent upon public sector clients to implement project appropriate site inspection and assurance processes that mitigate resultant risk from the construction phase". Guidance to support clients to determine the appropriate level and scope of independent site inspection and monitoring required, based on a risk assessment of the complexity, scale and nature of the project and an understanding of the level of assurance the inspection will provide, is included at [Annex A](#).

2.4. Further advice on how to procure the requirements of the project brief, including guidance on procurement strategies, models and procedures and how to score and maximise value for money are set out in [Handbook 2, Construction Procurement](#). Handbook 3, Construction Delivery will cover all aspects of managing the delivery of the construction contract, including the management and delivery of assurance of quality standards and specifications of the building.

## **Quality assurance roles and responsibilities**

1. As an “intelligent customer”, public bodies must have the capability or assured access to knowledge and skills to:

- Identify the appropriate level and scope of independent inspection and monitoring required based on a risk assessment of the complexity, scale of and nature of the project. These inspections will be bespoke to each project and depend on a range of variables. The list below is not exhaustive but highlights some of the potential examples that might be relevant, including:
  - Below ground conditions and materials (formation level stability, reinforcement specification, concrete strength, waterproofing)
  - Construction method of the built asset (offsite/onsite, timber, concrete, steel, hybrid)
  - Health and safety (plant, scaffold, PPE, welfare, personnel)
  - Environmental impact of construction techniques deployed both off and on site
  - Engineered details requiring approval by relevant qualified personnel
  - Elements falling within accredited certification schemes (such as ISO 9001, 14001 and 18001)
  - Requirements stipulated by the Construction Compliance Notification Plan (CCNP) issued by the local authority building standards division with the approved building warrant
  - Commissioning of internal systems.
- Put in place and manage appropriate governance arrangements. Effective governance gives an organisation the necessary internal controls to ensure the required approvals and direction is obtained at each appropriate stage of the project. Requiring a single point of accountability, usually the project sponsor, it necessitates clearly defined roles and responsibilities for the rest of the project team. It is key to achieving compliance regarding regulation and legislation and minimise risk across the project. Benefits include the optimisation of investment, prevention of reoccurring reasons for failure, motivation of the workforce through improved communication channels, and promotes engaged external stakeholders. Examples of how governance arrangements may be put in place include:
  - Creating a project management lifecycle that ensures defined points for approval

- Approval from the management board of the governance procedures and processes, including their acceptance of responsibility
  - Establishment of clearly defined roles, responsibilities and performance criteria for suitably qualified and experienced people
  - Documenting and communicating decisions made at approval stages
  - Implementing procedures that allow the management board to require an independent analysis of the project
  - Fostering a culture of improvement and frank disclosure
  - Ensuring business cases are supported by information that allows reliable decision-making
  - Implementing a risk management and change management process
  - Building stages into the project schedule to check the viability of the project against original goals of the business case.
- Consider how they will satisfy themselves that the construction works will be carried out in accordance with the contract and to the required design and built quality standards. They must clearly set out the assurance requirements in the contractual arrangements of the relevant design and project team members to ensure all parties understand the scope of the service required and the level of comfort this will provide that the quality of the design and construction will be fully compliant with the Project Requirement. Periodic checking that governance mechanisms are being applied should be performed by someone external to the project management team and who reports to the project sponsor. Examples of assurance requirements which may be set out in contracts include:
    - Contractors and designers Quality Plan or Project Plan; a document describing the management arrangements that will be used to control work both off and on site to the standard required by the contract
    - Inspection and Test Plan (ITP)
    - Clerk of Works or specific technical advisor roles and responsibility
    - British Research Establishment Environmental Assessment Method (BREEAM)
    - Certification requirements for design (energy/structure) and construction (plumbing/electrical)
    - Warranty provider details (NHBC/Zurich/Premier)

- These examples are in addition to the requirements set out by the building regulations. It is worth noting that the purpose of the building standards system is to protect the public interest. It is not intended to provide protection to a client in a contract with a builder. The building standards system sets out the standards to be met when building work or a conversion takes place, to the extent necessary to meet the building regulations. Inspections during construction and submissions for completion are to protect the public interest in terms of compliance with the building regulations and to discourage avoidance of the legislation. The inspections do not provide a system to control work onsite. That is a matter for the contracts and arrangements put in place between the client and builder.
- Set an appropriate budget for the project, which includes the relevant allowance to manage quality at all stages throughout the whole project life-cycle. This is particularly important at the earliest project delivery stage and during the development of the brief in order to establish and clearly define the quality objectives and approaches to ensure quality will be achieved.
- Identify the appropriate procurement arrangements to ensure they will provide the level of communication between themselves and members of the design team and that they will fully benefit from the professional advice and expertise of the design team.

### **Independent assurance**

2. Contracting authorities are responsible for determining and engaging the appropriate level and frequency of independent assurance required, which reflect the risks associated with delivering the project. The allocation of time must be sufficient for the party engaged to deliver this assurance to inspect the key aspects of construction and to sign off areas of work before they are covered up or enclosed. To secure this independent assurance clients may engage a clerk of works, inspector and/or technical adviser. Not all projects will merit, or justify, a full-time clerk of works. Whilst larger, more complex projects may do so, smaller, less complicated projects will not.
3. Clients have several options as to how to discharge this obligation, including:
  - In-house resource with the appropriate availability, experience and capability.
  - From a partner or associated organisation which has the requisite resource.
  - The requirements in the remit for the Technical Adviser to the Authority.
  - Appointing an independent external organisation with the required experience and capability.
4. Extending the remit of the Independent Certifier (on revenue funded projects) to include the required presence to inspect on an ongoing basis.