QUALITY & COMPLIANCE

Project: **An Enlightened Clients Guide to Total Project Quality**

Introduction – Key point summary;

- Purpose: To identify Project Quality and Compliance best practice and resource guidance for clients operating in various sectors of the built environment.
- To encourage a collaborative, multidisciplinary, integrated, holistic approach to achieving client's quality aspirations and consider common and transferable best practice between sectors.
- Deliverables: An online guide hosted on the new CESW website; sign-posting resources, templates, toolkits, case studies, other relevant CE groups and projects, legislative requirements, etc, searchable by Client roles/sectors.
- Guidance Framework: Selected Quality related toolkits and frameworks have been reviewed and a '6Ps - Total Project Quality' structure and scope is proposed for further development.

CONSTRUCTING EXCELLENCE South West

THEME GROUP

Table 1. Selected Quality related toolkits & frameworks – scope/section headings. Issued: 01/09/2021 Revision: 6 Status: Preliminary – Work in Progress/ Issued for comment.

Quality Management Principles (ISO)	**Design Quality Indicators** (DQI)	**ICW Toolkit** Integrated Collaborative Working - Principles	**PDRI** Project Definition Rating Index	**BiQ Quality Tracker** Quality Risk Categories	**Value Toolkit** (In development) Value Profile	**BREEAM**	**Government Soft Landings** Also BSRIA, Public Sector versions & GSL P22;	**Building a Safer Future** (BSF) Charter Champions Framework	**An Enlightened Clients Guide to Total Project Quality** (Aka 6P's - Draft structure/scope)
1. Customer focus **2. Leadership** **3. People involvement** **4. Process approach** **5. Systematic approach to management** **6. Continual improvement** **7. Factual approach to decision making** **8. Mutually beneficial supplier relations**	**Functionality** - Use - Access - Space **Build Quality** - Performance - Engineering - Construction **Impact** - Character and innovation - Form and materials - Internal environment - Urban and social integration	**Vision and Leadership** - Needs: purpose of project, goals, objectives - People: Culture to achieve potential - Benefits: Potential success for all - Maintaining the vision: Both journey and destination of project. **Culture and values**: Beliefs, desires, values - Empowering people: To decide what needs to be done, when, how and by whom. -Share learnings: Best practice developed by all - Open communications: Information for all - Trust, No blame **Process tools and commercial** - Early involvement - Common processes - Measure performance - Long-term Continuous Improvement	**I. BASIS OF PROJECT DECISION** A. Business Strategy B. Owner Philosophies C. Project Requirements **II. BASIS OF DESIGN** D. Site Information E. Building Programming F. Building/ Project Design Parameters G. Equipment **III. EXECUTION APPROACH** H. Procurement Strategy J. Deliverables K. Project Control L. Project Execution Plan	**A Likelihood of Proceeding** Early investment in rigorous design process to avoid re-design **B Attitude to Maintenance and Longevity** Specifying/tendering for low cost or quality & durability **C Attitude to Cost Certainty** Cost planning - risk of advanced stage design viability problems **D Attitude to Programme Certainty** Where dates are critical, quality may be secondary **E Likelihood of Obtaining Competitive Tenders** Early supply chain engagement in design **F Attitude to Collaboration** risk sharing/problem solving for quality solutions	**Natural** Air and water quality and biodiversity **Social** Community – citizens, community enterprise, equality and sourcing **Human** Safety and security, employment, skills and training, mental and physical wellbeing **Manufactured** Carbon and GHG, resource use, production, productivity **Financial** Capital cost, operational cost, revenue, economic benefits	**Health and Wellbeing**: indoor and external issues (noise, light, air, quality, etc.) **Materials**: environmental impacts of building materials **Transport:** transport-related CO2 and location-related factors **Water:** building consumption and efficiency **Waste:** construction and operational waste management **Pollution:** water and air pollution **Land Use & Ecology:** site and building footprint and ecological value and conservation. **Management**: management policy, commissioning, site management and procurement	**0. Strategy** - Identify Business Needs & Performance Targets **1. Brief** - Set Objectives & Operational requirements **2. Concept** - Test & Model design & Operational Strategy **3. Definition** - Check & Confirm Plan Assumptions **4. Design** - Refine Design & Construction Approach **5. Build & Commission** - Review Operational Aspects/Plan Comm. **6. Handover & Close Out** - Verify Commissioning & prepare for Start-Up **7. Monitor & Evaluate: POE Year 1** - Monitor & Evaluate Performance **8. Optimise: POE Year 2** - Optimise & Explain Performance **9. Lessons Learnt: POE Year 3** - Prepare Lessons Learnt	**Organisational Culture** Significant ways of thinking & doing underpinning a positive Bldg Safety culture **Leadership Commitment** Set & communicate clear direction, consistent approach, values, ethics, culture. **Supply Chain Engagement** Lead & manage across entire value chain to mitigate Bldg Safety risks. **Constn Product Mangmnt** Safety & quality of product used across construction lifecycle are fit for purpose **Managing Change** Amount & pace proactively led & managed, ensure individual & cumulative impact does not adversely affect Bldg Safety **Stakeholders Engagement** Actively engages residents, employees, etc about Bldg Safety risks & key decisions are visible **Assuring Competence** Persons, incl employees & contractors, deliver safety critical work during planning, design, Construction & occupation **Audit & Review** Management at all levels ensure Bldg Safety risks	**1. PEOPLE** - Leadership, Culture - Skills, Competence - Collaborative behaviour - Communications: Personal/Project Org. - Knowledge sharing/Feedforward **2. PURPOSE**: Strategic definition - Business case, Client strategic needs - Outcomes, scope, Stakeholders - Critical to success criteria, KPIs **3 PROCUREMENT**: Strategic approach - Longer term contracting models and frameworks - Win-win contracting arrangements - Equitable risk allocation **4. PRODUCT DESIGN:** Quality defined - Design Brief, Value outcomes - Quality Aspirations & attributes - Design Quality Indicators (DQI) - Critical to Quality criteria - Asset/Building Safety - Regulatory compliance - Standards and derogations - Operational criteria/outcomes - Capex/Opex design criteria - Past experience feedback **5. PROCESS EXECUTION** - Preparation & Briefing - Project Execution - Procurement: Supply chain - Project Controls: Design, Procure, Build - Deliverables - Aftercare - Client focus: Satisfaction monitoring **6. PERFORMANCE EVALUATION** - Client Operational Outcomes, KPIs

								identified, controlled & A&R used to support Continuous Improvement.	- POE/Asset/Building Performance Evaluation (BPE); - User & Stakeholder satisfaction - Build Quality - Project Team Performance (360) - Lessons Learnt/Feedback/Case studies

Table 1a Quality based Strategies & Delivery

Quality based strategies:	**PEOPLE** • Project Quality Leadership • Project organisational culture • Behaviours • Competence	**PURPOSE** • Strategic Outcomes • Value profile & priorities, KPIs • Strategic Quality aspirations	**PROCUREMENT** • Longer term contracting models & frameworks • Win-win contracting arrangements • Equitable Risk allocation (Professional services, Main contract & supply chain)
Quality in Delivery:	**PRODUCT: DESIGN** • Design Brief • Project outcome & value statements • Design quality attributes	**PROCESS** • Project Management • Detailed Procurement • Design development • Construction • Independent oversight • Aftercare • Operation & Maintenance	**PERFORMANCE** (EVALUATION) • Project Outcomes • Asset/Building Performance • Post Occupancy Evaluation • Team Performance